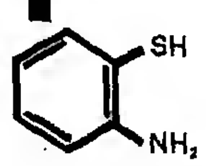
August 4, 1986

Chemical Marketing Reporter

NEWS AT HOME

NEWS ABROAD

THE MARKETS



CMR MARKET INDEX

CHEMICAL MARKETING REPORTER's market index of chemicals and related materials (100=1974 average), based on 97 key commercial chemicals, appears alongside with data for two weeks ago, last month and last year.

July 11, 1986	152.47
July 3, 1986	152.82
June 13, 1986	152.45
July 12, 1985	158.65

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SODIUM SULFATE: Demand and ... their downward course ...
PARABENS: Prices are higher ... better, producers say ...
CARBON BLACK: Oil's decline ... One-cent cut ...

Chemical Marketing Reporter

Waste Sites Debated 3

NEWSPAPER SECOND CLASS PO ENTRY AUGUST 11, 1986 2.25 an issue; 65 a year

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BOOTS TO US: Baxter Travenol's sale of almost all of its pharmaceutical business to Boots, providing a long-sought entree to the market for the UK firm .... **Page 3**

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Waste Facility Sites Debated

A hazardous waste treatment facility being built near the Ohio River in Henderson, Ky., by a Union Carbide subsidiary poses an "unreasonable risk" to public health and safety, two citizens' groups charged last week at a congressional hearing.

But Edward V. Lower, chief executive officer of Unison Transformer Services, Inc., defended his company's technology for destroying polychlorinated biphenyls (PCBs) as "an environmentally sound and cost-effective means."

The exchange came as the House Energy and Commerce subcommittee on commerce, transportation and tourism held a hearing to examine the status of regulations being developed by Environmental Protection Agency to govern the location of hazardous waste treatment, storage and disposal facilities.

Rep. James J. Florio, (D-N.J.), the subcommittee chairman, said the regulations will fill "a gaping loophole" in the current law that allows landfills to be located in close proximity to drinking-water supplies and densely populated areas.

"Current regulations only call on EPA to examine the potential for such catastrophic events as floods and earthquakes, even if a landfill operates only a few feet above an underground aquifer," Rep. Florio explained.

Marcia E. Williams, director of EPA'a office of solid waste, said the agency will propose the regulations in September 1977 and expects to finalize them a year later. Congress ordered EPA to issue the regulations

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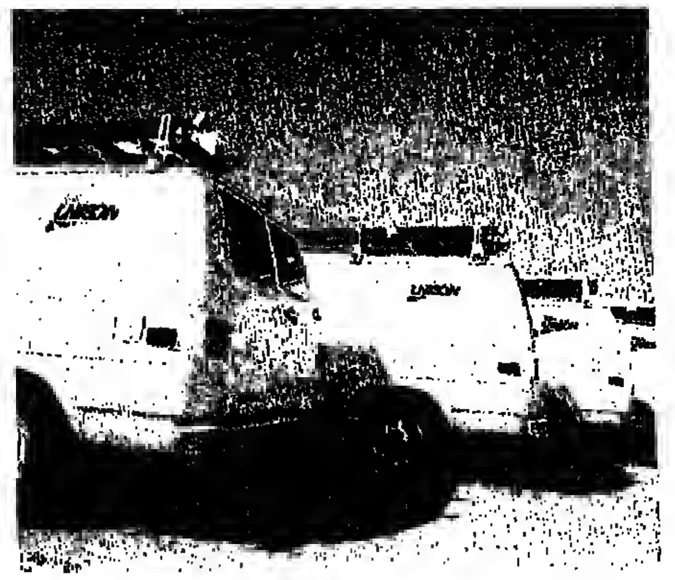

UNISON SERVICES TRUCKS: Lined up and reedy to go to service PCB-laden transformers. Siting of Unison plant wae focus of hearing last week.

BASF Charge Against Union Dismissed by Labor Board

BASF Corporation says it will appeal a ruling by the National Labor Relations Board that the Oil, Chemical & Atomic Workers Internotional Union has not engaged in unfair labor practices in connection with a two-year lockout of OCAW workers at BASF's Geismar, La., plant.

In a complaint filed this Spring with NLRB's regional office in New Orleans, La., BASF charged, among other things, that OCAW obtained and publicly disclosed confidential end proprietary BASF financial data as part of a "corporate campaign" against the company (CMR 6/23/86, pg. 14).

"We reviewed the evidence and decided that just wasn't correct," Frank Malone, regional director of the NLRB in New Orleans, said last week.

OCAW has raised questions about the safety of the Geismar plant, saying the company is "inviting another Bhopal disaster" there by using temporary personnel (CMR 3/10/86, pg. 3). BASF has vigorously denied the allegations, complaining that the union is attempting to win a labor dispute "through threats, propaganda, contrived media events and false allegations."

In dismissing all charges brought against the union, Mr. Malone said the "evidence was insufficient" to support BASF's allegations thet OCAW's representatives was bargoining in bad faith.

He said "both sides have bargained hard," but that several issues remain unresolved, in whet he described es a "classic conflict" between the company and the union.

Those issues involve wages, health-care benefits, subcontracting and seniority.

Union and company representatives met briefly last Tuesday morning for the first time since early June. Acording to Les Story, manager of the Geismar Works and chief negotiator for BASF, the union was seeking the company'a reaction to a counter offer submitted earlier.

According to Mr. Story, the company "expected dismissal" of its charges by the regional NLRB office, saying this is the "first instance of union harassment" on such a large scale. The compony's appeal will be filed with the NLRB's general counsel in Washington, D.C.

OCAW said dismissal of the BASF charges against the union "underscores OCAW's allegations that the real perpetrators of violations of workers' rights is BASF." The union has filed unfair labor practice charges of its own against BASF, which ore still under investigotion.

The OCAW workers, numbering 370 at the Geismar plant, were locked out on June 15, 1984, after rejecting the company's "final offer" for a new contract. BASF proposed a three-year contract, with an eight-month wage freeze in the first year of the contract. The company justified the wage freeze, saying a survey found the Geismar workers to be the highest paid in the Gulf Coast region.

The union sought a one-year contract with an immediate 8 percent increase.

Rhone-Poulenc, Rohm & Haas Collide in Herbicide Market

Rhone-Poulenc says that two additional patents it obtained for its post-emergent herbicide "Tackle" late in July will strengthen its position in the patent litigation with Rohm and Haas which has been pending in the Delaware Federal District Court since September 1978.

The litigation concerns acifluorfen, the principal ingredient in "Tackle" and in Rohm and Haas' herbicide "Blazer." The litigation was originated by Rohm and Haas, which sued Mobil Agricultural, the original developer of "Tackle."

Mobil countersued, but never obtained a registration for "Tackle." When Rhone-Poulenc hought Mobil's agricultural chemical business in 1981, it inherited the litigation as well as "Tackle."

Now, Rhone-Poulenc says, Environmental Protection Agency bas granted a registration for the herbicide. Although it was late in the season to initiate a full marketing campaign (in mid-April), tba company claims that the market introduction of its version of the herbicide "was a resounding success".

The two new patents, Re. 32,215 and Re. 32,216, were granted on July 22 and July 29 over the objections of Rohm and Haas and cover the manufacture, use and sale of both "Tackle" and "Blazer", according to Rhone-Poulenc.

"These two patents, together with Rhone-Poulenc's US patent 3,979,347, which waa granted September 7, 1976, cover every pound of "Blazar" ever manufactured and sold by Rohm and Haas in the United States," Rhone Poulenc says.

Both of the two companies are now actively puraulng the previously dormant litigation, which their attorneys last week described as being in the pretrial staga.

A apokeswoman for Rohm and Haas said that company would restrict its comments on Rhona-Poulenc's claims because of the litigation, but that it doesn't agree with them. As for the market, ahe said, "We faal we have developed a very strong positioo sinca 1980" and that is unlikely to ba much affectedby the introduction of "Tackle," at least in the near term.

Acifluorfen is in tha phenyl ether class of herbicide. Rohm and Haas obtained its patent in 1975.

Chemical Marketing Reporter

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AUGUST 11, 1986

Boots Expands in US Via Baxter Travenol

Baxter Travenol Laboratories set the stage for its virtual withdrawal from the pharmaceutical business last week when it agreed to sell its Flint prescription drug unit to Boots Company of the UK for as much as $600 million.

In July, Baxter Travenol agreed to sell its American Critical Care unit, which makes critical care and cardiovoscular drugs, to E.I. du Pont de Nemours & Co. for $425 million in cash. The company completed the sale of its American Medical Optics unit in May to SmithKline Beckman Corporation for $165 million.

Proceeds from tha sales of these businesses will be used maioly to pare the $2 billion in debt Baxter Travenol accumulated in its $3.7 billion acquisition of American Hospital Supply Corporation laat year.

Baxter Travenol will now focua on medical and surgical manufacturing and distribution, information systems for the medical community, and home care clinics and labs, leaving a generic drug diatribution operation as its only link to the pharmaceutical business.

Under tha agreement with Boots, the UK firm has agreed to pay $555 million up front for Flint, and aa much as $45 million more, based on the future sales performance of Flint's chymopapain products, "Discase" and "Chymodiactin".

The two products "are not doing very well at the moment," but Boots hopes to turn them around, according to Bernard Thaobald, corporate development director of Boots. However, "we weren't prepared to pay on the basis of 'it might happen'," he explains.

Boots is financing the acquisition through the issuance of around 180 million new sharea of stock valued at approximately $3.03 per share. Tha entire issue was placed last Wednesday with insitutional investors, although some or all of the new shares could ba recalled and sold to Boots shareholders.

Boots is paying a steep pramium for Flint, which recorded pre-tax profits of $33.1 million last year on sales of $53.7 million, Boots acknowledges. Tha company was willing to do so, because it has beeo looking to buy a US drug business "for a number of years" and there are "very few occasions when something becomes available," says Mr. Theobald.

Wall Street onalysts say the prevailing rate for drug businesses these days is 17 times pre-tax earnings, which is about what Boots is paying.

Although Boots has an existing US subsidiery, Boots Pharmaceuticals Inc. in Shreveport, La., the firm's participation in the US market is mostly through licensing arrangements with American firma.

Upjohn, for example, markets Boots' "Motrin" drug here for the treatment of rheumatism.

Boots will immediately combine the sales forces of Flint and its US subsidiary and eventually merge the two entirely into one

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SURGICAL GLOVES: With sale of pharmaceuticals operation to Boots, Baxter Travenol has shifted almost completely to hospital products and services, retaining only a generics connection to the drug field. These "Triflex" gloves are specially designed for surgeons.

Hazardous Waste Treatment

More atringent requiremeots for drivers who transport hazardous materisis as well as national licansing standards ware approved last week by a Senate paoal.

"The public is antitled to professional and unimpaired performance," said Sen. John Danforth, R-Mo., chairmao of the Senate Commerca Committee, as the bill cleared the panel.

The House has not begun work on the measure to reautborize tha Hazardous Materials Transportation Act whose main critic is the Reagao Administration. It saya rules being formulated in tha Transportation Department eventually should make tha measure unnecessary.

There was no dissent against the Danforth-bill, which would authorize DOT to cut Federal highway funds by 5 percent for atates not in compliance with the standards by Sept. 1, 1990.

An additiooal 5 parcent annual cut would be approved for states that remained out of compliance.

Under the legislation, DOT would establish minimum licensing standards for the states by March 1, 1988. Thay would iocluda written aod behind-the-whael tests for all commarcial drivars and special provisions for drivers of tank trucks and other vehicles containing hazardous wastes.

Hazardous materials drivers would be required to pasa tests demonstrating their knowledge of hazardoua materlala regulationa, properties and bandling of hazardoua materlals, and emergency response procedures.

Thay would also have to demonstrate their ability to handle the vehicla and operate safety equipment.

A study releasad by the Office of Techoology last month said mora than 60 percent of truck accidents and spills involving hazardous materiala are due to human arror either by drivers or other workers such as loaders.

Sunflower Oleic Raised By Lubrizol Corporation

Later this month, a division of Lubrizol Corporation will begin harvesting a new strain of sunflower that has a 400 percent higher concentration of oleic acid in the crude sunflower oil than conventional crude oil. The company is also working to develop a new form of rapeseed with a sharply higher concentration of erucic acid than current forms of the crop.

The company's aim is to market 80 percent oleic acid crude aunflower oil as a specialty product to the food and chemical industry. The company says it sells the oil as a "premium vagetabla oil" in a wide range of edible products ranging from frying oil for potato chips to infant formula.

As an industrial chemical, Lubrizol says the high oleic scid is marketed as a high performance, specialty product in a wide range of applications including detergenta, plasticizers, and lubricants.

The new plant is the product of a broad range of research and development by Lubrizol scientists that combined mutagenesis, recombinant DNA technology, and pollen cross breeding techniques. About 90,000 acres of tha seed were planted this year and Lubrizol expects to process 40 million pounds of the crude oil, according to Bruce H. Grasser, vice-president of Lubrizol Enterprises.

The enginaered sunflower plant program is ruo by a unit of Lubrizol called SVO Enterprises Corporation, Columbus, Ohio. Research on the new strain of sunflower was begun by Sigco, a Breckenridge, Minn.-based sunflower seed company which Lubrizol acquired in 1982.

SVO Enterprises, formed in 1984, harvested its first high oleic sunflower crop last year, and processed 8.5 million pounds of crude oil for sale to the food industry.

This year, in addition to marketing the crude oil, Mr. Grasser says the company will offer two high-stability, edible specialty oils in the fourth quarter, and perhaps a chemical derivative of oleic acid. Mr. Grasser says the highly refined and purified oils coming onto the market will prevent foods from turning rancid without affecting the color or taate of the food.

While developing and marketing a premium oil for the food market, Mr. Grasser says the company's making a strong puah for tha oil into the chemical businass, where they

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Chemical Firms Join Coalition on Rail Fees

A coalition of more than 2,000 large and small shippers dependent upon the railroad industry for transportation urged the Interstate Commerce Commission last week to revise the current standards employed to determine the financial health of the railroad industry.

"Changes in revenue adequacy daterminations are long overdue and will make a significant contribution to providing a more realistic picture of railroad financial condition," the shippers said in atatements filed with ICC. The Fertilizer Institute and Chemical Manufacturers Association were among the participants in the filing.

ICC is currently reviewing its aystem for determing the revenue adequacy of individual railroads. The present mathod is based on a return-on-investment/coat of capital atsndard, which has been tha subject of much controvarsy.

Under the system, ICC has found that no Class 1 carriers were revenue adequate in 1984, even though tbe industry appeara to ba in good haalth as demonstrated by recent investment moves, such as Norfolk Southern's bid for Conrail.

An accurate determination of the railroads' financial haalth is of critical importance to shippers bacause the financial health of a railroad — or its revenue adequacy — is a factor in determining a captive shipper's transportation rates.

Until a railroad reachea revenue adequacy, ICC granta railroads great ratamaking freedom even where no practical competitive tranaportation altarnativa exists.

Shippers have long complained, and tha ICC has recently acknowledged, that current standards for railroad revenua adequacy do not accurataly raflect tha financial condition of the railroad industry.

The coaliton urged the ICC to aupport revisioo to assure that the revenue adequaoy aoalysis focuses exclusivaly on rail-related activities of each carrier. Currently, inclusion of noo-railrelated information, such as incoma tax expenses for ooo-rail affiliates, distorts tba ICC's analysis, the shippers said.

Tha group also recommanded tha cootinoad use of original cost accounting. Dr. Alfred E. Kahn, an economist who joined in the filing, aaid tba original cost standard is a "fully aufficieot and valid test of revenua adequacy, and is far auperior to replacement cost on grounds of accuracy, verifiability, and administrative practicality."

The coalition also urged ICC to support treatment of deferred taxes as a zero-cost source of capital; use of the embedded cost of dabt in datermining the overall cost of debt; and the actual book values of dabt and equity for determining capital structure mix.

Pesticide Reform: Gain This Week?

The Senante Agriculture Committee expects to complete work on legislation overhauling the nation's basic pesticide law this weak before Congress adjourns for its Summer recess, but the panel must atill deal with two controversial issues — patent term reatoration and data compensation.

The committee haa been considering a bill approved by the House Agriculture Committee June 18 to reform and reauthorize the Federal Insecticide, Fungicide & Rodenticide Act.

The Senate panel, chaired by Sen. Jesse Helms (R-N.C.), has agreed to most of the major provisions of the House bill, which primarily seeks to speed up the Environmental Protection Agency's review, or "reregistration," of approximalely 600 pesticide active ingredients that were approved for use before November 1984.

The review ia intended to determina whether these building block ingredients meet current health and safety testing requirments, and to assess the aafety of continued registration of the chemicals.

However, the senators agreed last week to amend the House bill to include a comprehensive program for protecting groundwater against pesticide contamination.

Sponsorad by Sen. Paula Hawkins (R-Fla.) the amendment would require EPA to establish groundwater residue guidance levels for pesticides that have the potential of leaching into subsurface water, or have been detected at three sampling points or in a drinking well that serves over 10,000 people.

The provisions, which have the support of EPA, tha chemical industry and environmental organizations, are expected to provide a

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Robert P. Bauman, vica-chairman of Textron Inc., who has been nemed chairmen of the Baecham Group, the $4 billion phermacauticals and conaumer products compeny baaed in Middlesex, England.

Hercules, Reichhold Mull Tall Oil Joint Venture Firm

Hercules Incorporated and Reichbold Chemicals, Inc. have begun exploratory discussions that could lead to the formation of a joint venture for the production of tall oil and wood rosin, fatty acids and byproducts from crude tall oil and wood stumps.

The talka are directed loward determining the potential benefits of combining tha two companiea' manufacturing facilitiea for these primary products, RCI saya.

Tha result would be an independent joint-venture company which would provida wood and tall oil rosin and fatty acid raw materiala for the resin manufacturing needs of both Hercules and Reichhold.

Both companies curreotly have operating tall oil fractionating facilities for the manufactura of rosin and fatty acids. In addition, Harcules bas an active wood rosin extraction plant in Brunswick, Ga.

The two companies use the materials iointernally in the manufacture of a variety of resins. The resins businesses would not be included in the venture, the companies say.

The purpose of the proposed joint venture is to even out the aupply and demand balance, as well as to have a ready source of raw material, a Reichhold spokesman says. By combining resources, the companies can protect agalnat a shortfall of one of the products on one sida against a shortfall of another material on the other side, tha spokesman says.

Hercules and Reichhold are the only two independant producers of tha materials involved. Competing producers are vertically integrated paper companiea, most notably Georgia-Pacific, Union Cnmp, and Westvaco. The talks are considered a signal to the industry that Harcules and Reichhold are determined to stay in the buainess.

Induatry analysts suggest tha proposed joint vantures la a coat-saving maaaure

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DuPont Philips Venture Opens US Center for Optical Disks

Philips & Du Pont Optical Company Nieuwegein, the Netherlands, has announced the opening of a new marketing and technical center within the United States.

Tha PDO facility, located at Foulkstona Plaza near Wilmington, Del., will be responaible for marketing and technical applicationa davelopment of optical discs for the informatioo storage and retrieval markets worldwide.

PDO is the result of a joint venture between tha Du Pont Company and N.V. Philips of the Netharlands. Both companies have combined thair existing compact disc (CD) and high-density information storaga disc operatiooa, with the goal of becoming tha world's pre-eminent supplier of optical discs.

According to Robert Spengler, PDO's diractor of marketing, the company is expected to genarate annual salaa of about $1 billion in the early 1990's.

Ha said, "PDO has unmatched technological, manufacturing and marketing strengths. The initial assets of the company include the world's largest CD-audio manufacturing facility in Hanover, West Germany; a video disc and data diso operation in Bladkburn, England, and pilot facilities at Eindhoven in the Netherlands and Wilmington that are producing write-once discs of various sizes and capaoities.

"PDO alao has in place $150 million in initial capitalization, and a further $400 million in facilities investment will be added by 1990."

Mr. Spengler noted that PDO's annual research and development program ia anticipated to be $60 million by 1990 and that by then the venture will amploy approximately 3,500 people at about 10 facilities worldwide.

"In addition to opening the new marketing and technical center, we also bave construction well under way on our first US manufacturing plant which will become operational before the end of this year. We plan to be delivering audio discs to stores in time for this year's Christmas shopping. This manufacturing facility is located in Kings Mountain, N.C.," he said.

News Capsule

Monsanto Sells Division

Monsanto Chemical Company, an operating unit of Monsanto Company, has compleled the sale of the Equipment Division of Radiation Dynamics Inc., Melville, N.Y., to Sumitomo Heavy Industries Ltd. of Tokyo for an undisclosed amount. Radiation Dynamics manufacturers high energy electron beam accelerators for the tire, medical, wire and cable, electric utilities and food Industries. Monsanto said the aale is designed to better position the company to attain its strategic objectives.

Grow Group Buys Assets

Grow Group Inc. has completed the acquistion of the business and certain assets of the Chemical Packaging Division of Georgia-Pacific Corporation for $36 million in cash. Included in the purchase is the "Aqua Chem" pool chemical product line and the division's private label and brand name household cleaning products. The purchase price iaaubject to a post-acquisition audit. Grow Group produces specialty chemical coatinga, privata label household producta and OTC pharmaceuticals, health and beauty aids.

Cyanamid VP Appointed

W. Perry Brown, corporate vice-president and director of American Cyanamid Company's personnel division, has been appointed to the White House advisory committee on federal pay, which was established in 1970 to advise the President on salary issues for Federal employees. Mr. Brown's term expires in January 1992. Prior to joining Cyanamid in 1976, Mr. Brown held executive positions with Merck & Co. and Hudson Pulp & Paper Corporation.

BP Signs Accord

BP Chemicals Americas Inc. and Sterling Chemicals Inc. have completed an agreement giving BP exclusive righls lo produce from the acetic acid plant al Sterling's Texas City, Tex., site. "BP Chemicals already is the largest acelic acid producer in Europe and thia agreement enables BP Chemicals Americas to have a significant presence in the US market as well," the company aays. An agreement tn principle had been announced In June.

Rohm and Haas Buys

Plaskon Electronic Materials Ltd., a subsidiary of Rohm & Haas Company, has acquirad Morton Thiokol'a Singapora plant and the rights to the apoxy ancapsulants which are manufactured there. The products are used by the semiconductor industry lor integrated circuita, relays, resistors and capacitors. Terms nf the acquisition were not disclosed.

Alcoa Sells Unit

Alcoa has sold Buckeye Molding Company, a plastic packaging subaldiary in New Vienna, Ohio, to Packaging Resources Inc. of Mt. Carmel, Pa. Packaging Resources is a wholly-owned aubsidiary of Peck-Lynn Group Ltd., Chicago. Buckeye Molding, which baa annual sales of about $30 million, manufactures plastic food packaging producta. Packaging Resources, with annual salea of more than $25 million, manufactures and sells packaging materiala for the food and beverage Industries.

Dover Enters Market

Dover Chemical Cnrporation, a wbolly-owned subsidairy of ICC INdustries Inc., hss entered the organopbosphite markat with the completion of a new 7,500-square-foot plant in Dover, Ohio. The plant ts capable of producing "volume quantitias" of diphanyl isodacyl phosphite, phenyl didecyl phospite and TNPP, used by the plastics, rubber and allied products Industrtes.

Robart A. McMillan, who has bean alected vice-prasidant and treasurer of B.F. Goodrioh Company. He waa previously director of planning and davelopmant.

EPA Okays A Biotech Test At Montana Site

Environmental Protection Agency says a Montana State University scientist can proceed with the small-scale field testing of four strains of a fungus, which has been gentically altered by exposure to ultraviolet irradiation.

Dr. David Sands is proposing to field test altered strains of the fungus *Sclerotinia sclorotiorum* to assess their efficacy as herbicides against the weeds Canada thistle and spotled knapwood.

EPA says the field test will be carried out ot a site in the state of Montana over a two-year period. The test will cover an area that is smaller than one acre.

The agency says that based on the dala that it has collected on the fungus, it has determined that the potential risk of small-scale field testing of the altered straina is minimal. Consequently, EPA says it will not requiring an experimental-use permit.

Hoechst Hikes Its Rigid PVC By 50 Percent

American Hoechst Corporation plans to expand ita capacity for rigid polyvinyl chioride film by nearly 50 percent.

The company will install, at its Delaware, City, Del., plant, a new calender line using new technology developed in cooperation with Hoechst engineers in Europe.

"The US market for rigid PVC film will continua lo grow at rates well in excess of tha gross national product, and this invesment will enabla us to improve our leadership position of producing and marketing rigid PVC film and sheet," saya David R. Beresford, vice-president and general maoagar of the American Hoechst PVC film products business unit.

The project is expected to cost more than $10 million.

Drug Bill Gains

Tha Senator Labor & Human Resources Committee last week approved legislation to allow the submission of abbreviated new animal drug applications for generic equivalents, and to restore up to five years of tha patent terms for pioneer animal drugs to make up for exolusiva marketing tima lost in iha Food & Drug Administration approval process.

Phillips Petroleum Reaches Debt Goal

Phillips Petroleum Company aays it has essentially reached its goal of selling off $2 billion in assets as part of its debt reduction program begun early last year.

The company says the recent sale of carbon black operations in US and Europe, coupled with the closing of a sales contract with Shell Oil Company covering aeveral onshore and offshore oil exploration and production properties, has pushed the total from the asset ssles program to over $1.95 billinn. Negotiations fnr the sale of some other "minor" assets continuea, the company says.

The latest $250 million in assets sales compieted by Phillips include a 135 million-pound-per-year carbon black plant located in Orange, Tex. which was sold in June to J.M. Huber Corporation.

At about the same time, Phillips sold a carbon black company in Hannover, West Germany to Columbian Internatlnnal Chemicals Corporation. The oil company also sold its minority interest in Negromax, a company that makes rubber, carbon black and other chemicals.

On August 1, Phillips sold its Huntington Beach, Calif. oil field to Shell. The field, 27 miles south of Los Angeles totalled almost 6,000 acres of nffshore and onshore lease sites and waa producing, about 12,600 net barrels of oil daily.

In addition, Shell oil bought Phillips Bets Field, a 1,650 barrel per day Federal lease site just north of Huntington Beach, and five undeveloped offshore blocks called the Lion Rock Unit, located north of Point Arguello. Shell also purchased several smaller tracts on shore and offshnre nf California.

By the end nf 1986, C.J. Cilas, Phillips' chairman and chief executive officer aaya the company'a debt will fall below $6 billion, down frnm the $8.6 billion peak reached in early 1985. A large portion of the debt waa accrued in fending off takeover attempts by T. Boone Pickena and Carl Ichan.

Phillips sold or contracted to sell $1.4 billion in assets through year-end 1985. Twn of the larger properties anld last year wera Geyaors Geothermal Company, which went to Freeport McMoran iast Fall for $215 million, and Netherlanda Oil & Gaa properties, which was sold laat September to Newmont Oil Company for $165 millinn.

In 1986, Phillipa turned its attention toward its chemical properties, particularly its large stake in the ailing carbon black industry.

In February, Phillips sold its Midwest Fertilizer Company unit and American Fertilizer & Chemical Company unit to CPEX, Inc. and its 49.8 percent stake in a Belgium petrochemical plant to Petrochim SA.

Then the company began selling its carbon black units. In April, deals were closed tn aell the 275-million pound per year carbon black unit in Borger, Tex. to Sid Richardson Carbon & Gasoline Company.

NL's 'Pill' Overturned

Federal Appeals Court in New Ynrk last week agreed to review a ruling, handed down earlier in the week in Federal Court in the same city, that NL Industries, Inc.'a "poison pill" anti-merger defense is illegal.

NL is defending itself against a hostile takeover bid by a group of investors led by Harold Simmons, of Dallas, Tex. Through their vehicle, NL Acquisition Corporation, the investors are in the midst of a tender offer for NL's shares.

The Second US Court of Appeals will hear arguments on August 28 on NL's anti-takeover measure, which entitles stockholders tn purchase shares at half-price after any unapproved acquisition of NL. Meanwhile, the acquisition group haa bean enjoinad from purchasing any additional NL shares. The group now claims ownerahip of 20 percent of NL's 60 million outstanding commnn shares.

Judge Vincent L. Broderick of Federal Court had atruck down the anti-takeover measure, terming it an "illegal device" because it would effectively bar anyone from taking over lhe company. NL'a lawyers had noted that more than 130 companies, including Allied-Signal Inc., J. C. Penney Company and Time Incorporated have adopted auch anti-takeover measurea.

NL's lawyers disputed Judge Brodarick's contention that NL'a "poison pill" ia more restrictive and discriminatory than others.

NL said that it intends to continue vigorouaiy to aeek to uphold its rights plan "and the protectinn it affords NL'a shareholders against the inadaquate tander offer by the Simmons Group."

OPEC Oil Move Prompts Shift In Policy of US on Reserve

President Reagan has decided to fill the Strategic Petroleum Reserve at a 750-million-barrel lavel as "the best defense" against the impact of rapid crude oil price hikes and supply interruptions, the White House said iaat week.

Tha decision was annouocad shortly after OPEC agreed on sharp production cuts for two months in an attempt to restore slumping oil prices.

Prasident Reagan made the decision after a domestic policy council meeting, according to spokesman Larry Speakes.

"Reaffirmation of our goal of a 750-million-barrel Strategic Patroleum Reserve demonstrates tha Presidant's continued leadership and commitment to our allies that holding strategic atocks is tha best defense against the affects of rapid price escalation or supply interruptions," Mr. Speakes said.

The resarve was created in tha Carter Administration to maintain an emergancy supply of oil in case of price and diplomatic instability among Middle East oil-producing nations.

Prices are relatively low now, although they may rise as the result of OPEC's decision to trim production. Energy Secretary John Herrington said he believes oil prices will aventually sattle somewhera $15 and $20 par barrel.

Opponents have cited budgetary restraint aa a reason for not filling the reserva, whfch now contains about 503 million barrels, most of it purchased from Mexico.

"The President committed tha Administration to continue filling the reserve through fiscal year 1987," Mr. Speakes said. "He gave Mr. Harrington the discretion to exceed the current congressionally approved rate, should oil pricas maka this an economically attractive choice."

He said President Reagan also urged other oil-conauming nationa to taka similar action, "stressing that strategic stockpiles ara the best defense against world oil aupply disruption."

The Energy Department has been filling the reserve at a rate of 50,000 barrela per day under congressional approval that lasts until September 30.

Mr. Herrington said he has been a proponent of "an aggressive fill rate ... as aggressive as we can get with these prices." He said he would like to see the government add 100,000 barrels per day, but acknowledged that the tight budget would likely rule out [illegible]

OILS, FATS & WAXES

Hercules, Reichhold Mull

Continued from Page 7

aimed at consolidating the newer, higher-quality facilities of both companies, while eliminating the ones that may need expensive repairs.

Rether than run severat small capacity plants of varying degrees of efficiency, the two compaoles would combine their best facilities to form one or two "world class" capacity operations, and abandon older facilities, the sourcee say.

This ia thought unlikely, right now, however, ae the high level of demaod for the rosins and fatty acids woutd make tt unwiee for ths compenles to shut down production fecilities at elther company.

Hercules plants considered potential ceodidstes for any joint venture that may artse from the talks loctuda tatl oit fractioneting ptants in Portland, Ore.; Franklin, Va.; Savanneh, Ga.; end Burlington, Ootarlo, Ceneds.

These plents all produce tatt oil fetty acids and rosins. In addition, the wood rosin extrection plants in Brunewick, Ga., and Hettiesburg, Miss. would he considered for inclusion. The wood atumps operetion in Hettiesburg. Miss. was shut down three yeere ago and is currently on standhy status.

HERCULES' FACILITIES

Reichhold declines commeot on which of tta plents would be potentially considered for inclusion in e joint venture, saying thet it is too early to speculste on the matter. Reichbold has tall oil frectioneting fecilities tn Bay Minette, Ala. aod tn Oakdale, La.

The tatl oil fractionating capacity of all of the plants owned by Hercutes totats 177,000 tons per year. This includes all of the plants in ths US, as well as the franctionating faciltty in Burlington, Ontario, Canada.

For Reichhold, the total US capacity is 100,000 tons pcr yeer. None of the Individual ptsnts owned hy either compeny has a capecity exceeding 65,000 tons per year. Plants which operate et cepacities ctoser to 120,000 tons per year are considered "world class," according to industry sources.

CARNAUBA — The pricing on carneuba wax hes remained steedy end unchaoged for severs1 weeks now. The merket hes been described ss typicelly qutet for the Summer months, atthough one dealer reports thet hs ts doing helter now theo he wea last year at this time.

Some traders are expectiog higher prices from Brazil this year. Brazilien producers are eeid to he considering price changes, end may come to e decisloo this month, e source aays. It is pointed out, however, thet the Brazilians heve been considering a chenge for some time, end hsve prevtously been unable to reach a final decision in the amount of time cited.

CORN OIL — The corn oit market recetved a jott laat week when a significant emount of huying took place. In what was described as an unusually large amount of tradtng on the domastic market, prices reached tha 18c. per pound mark, sources say. The buying was seld to he concentrated emong three mejor consumers.

Tha activity was e surprise because tha Industry was expecting the coro oll market to foltow the general downward trend seen in most of the rest of the olls market. Analysts were unsure if the activity waa an indication of tight August supplies or part of en effort to firm up the market.

It is heltevėd thet iha high pricing cannot he eustetned and will sooo come back dowo. The competitton of the olls market makes tt unlikety that the price wtll stay this high, since msny appticatlons of tbe olt are substituteble. One brokerege sourcs expects to see the price fall until it hreaches the most receot lowa, a little over 16c. per pound.

Prior to the recent heavy buying, huyers had been eeen as heing kept out of the corn oil merket by the relatively low prices of competing olls, with tittle forward huying. The merket hed been very stow ea consumers waited for the new crop to drive prices down. The eupply hes heen descrthed ss tight, hut sufflcleot to meet demand. Harvesting has slreedy begun lo Texas, wtth the main barvest expected to hegin in mtddle to tate September.

LINSEED OIL — Ths market for this oil haa heen very ateady, end running at normat tevels for this time of year. "It's not a very up and down thing," a source says, pointing out that tha price has remained unchanged for a number of weeks.

Sources note that the tnk husiness hes not been doing as wett as bed been expected. Ink producers, therefore, are "a tttte behind" tn their linseed oit orders. Many of them, however, are satd to be running "roughly close" to last year's tevel of purchasing, sources say.

The current flax crop, concentreted in North and South Dakota, is said to be looking very good in terms of yield. No price decline in tinseet oil ts expected before early October when harvesting begins.

SOYBEAN OIL — Two recent government-assisted exports have hetped to bolster an otherwise sagging soybean oil market. Department of Agriculture issued a $5 million loan to Haiti under a Title III credit sales agreement of Public Law 480. Haiti then pur-

PRICES TRENDLINES

WEEK ENDING AUGUST 8, 1986

CHANGES/UP

Corn oil, Midwest, ¼c. per ton
Grease, yellow maximum 10%, ffa tanks, ¼c. per lb.
Peanut oil, Southeast (restricted), 1c. per lb.

CHANGES/DOWN

Coconut oil, NY, ¼c. per lb.
Cottonseed, 41% bulk, Memphis, $25 per ton
Cottonseed oil, Valley, 1c. epr lb.
Lard, loose, bulk, tanks, Chicago divd., 1c. per lb.
Palm oil, NY, 2c. per lb.
Soybean, 44% bulk, Decatur, $8.80 per ton
Soybean oil, Decatur, .8c. per lb.
Tallow, inedible, fancy, tanks, divd. NY, ¼c. per lb.

OILS, FATS INDEX

The Oils, Fats & Waxes Index reflects the prices of 11 represantstive materials in this sector and the quantity of each produced in 1985.

Aug. 6, 1986	79.16
Aug. 1, 1986	63.30
July 11, 1966	83.56
Aug. 7, 1985	66.46

Chemical Prices Start on Page 32

FRIDAY SPOT PRICES

MARKET CLOSE AUGUST 8, 1986

CRUDE VEGETABLE OILS		
Coconut oil, NY	lb.	.13¼
Coconut oil, Pacific	lb.	NA
Corn oil, Midwest	lb.	.1725
Cottonseed oil, Valley	lb.	.16
Linseed oil, Minneapolis	lb.	.29
Palm oil, NY	lb.	.12½
Peanut oil, Southeast (restricted)	lb.	.31
Soybean oil, Decatur	lb.	.14½
REFD. VEGETABLE OILS		
Coconut oil, t.w., NY	lb.	.18¼
Corn, jumbo tanks	lb.	.2480
Cottonseed oil, jumbo tanks, NY	lb.	.2675
Peanut oil, jumbo tanks, NY	lb.	.39
Soybean salad oil, NY	lb.	.1595
OILMEALS		
Cottonseed, 14% bulk, Memphis	ton	$100
Linseed, extracted, 34% bulk, Fargo	ton	$100
Peanut, 50% bulk, SS, Alabama	ton	$170
Soybean, unrest., 44% bulk, Decatur	ton	$154
FATS & GREASES		
Grease, white, choice, tanks, divd., NY	lb.	.9½
Grease, yellow maximum 10%, ffa tanks	lb.	.8¼
Lard, loose, bulk tanks, divd., Chicago	lb.	.15½
Tallow, inedible, fancy, tanks, divd., NY	lb.	.10
Tallow, inedible, blch., tanks, divd., NY	lb.	.8¼

OILS, FATS & WAXES

chased the oil on August 1. The Haitians bought 12,079 metric tons of once refined soybean oil.

Earlier, Pakistan had purchased soy oil under a Title I agreement of PL 460. The Pakistanis bought about half of their $50 million allotment on July 29, having spent the first half in early July, according to Foreign Agricultural Service. The total amount they purchased was 126,400 tons.

Industry sources have said that if it were not for US government support programs very little foreign trading of US soybean oil would be taking place, due to the non-competitive pricing of the US product. Domestically, soybean oil is suffering from a "burdensome supply," according to a source. Sources see the oil as being under downward pressure, which is expected to continue when the new crop comes in during and after October. It is said that low domestic consumption is combining with heavy meal-driven crush rates to keep stock supplies at high levels.

TUNG OIL — The market for tung oil is described as steady and "rather firm," according to industry sources. The market experiencing its usual Summer slowdown, but business is no slower than is normal for this time of year.

Harvesting of the South American crop is taking place now on a small scale, and so far the new crop is said to look good. September and October tend to be a sensitive time for the crop, and a better estimate of the crop's condition can be made after that time, a source says.

Stock supplies are said to be good in the US and throughout the world. It is considered unlikely that the price will soften further than it has, and a firming trend is foreseen.

FDA Okays Dyes But Faces Challenge

Food & Drug Administration gave its final approval Thursday to external uses of two drug and cosmetic dyes, but the decision will be challenged in court.

Although the color additives have been shown to cause cancer in laboratory animals, FDA said it agreed with an industry assessment that the risk to the public "is, indeed, trivial."

In a *Federal Register* notice, the agency said it was granting a trade association's request for approval of the dyes, orange no. 17 and red no. 19, for externally applied pharmaceutical products and cosmetics.

Public Citizen Health Research Group said the decision would be contested in court as a violation of the Delaney Clause of the Food, Drug and Cosmetic Act, which prohibits agency approval of any product that is shown to cause cancer in animals.

"No one believes, except for the Reagan Administration and their friends in industry, that there's a safe amount of carcinogens," says Dr. Sidney Wolfe, director of the public interest group.

The additives, which have been under agency review and the subjects of lawsuits for over 20 years, are being used under a temporary approval in products such as lipstick, nail polish, perfume and shampoo.

But they are barred from foods and drugs that are swallowed because laboratory studies have found that they caused cancer in animals that were fed high doses.

"In relation to other risks regulated by FDA and other Federal agencies, the risk present ... is, indeed, trivial," the agency said in the notice. "The risk of cancer is so low as to be essentially non-existant."

AROMATIC ORGANICS

Phenol Price Advance Falters, Despite Strong Housing Mart

The July 1 industrywide phenol price initiative has met with little success, producers acknowledge. Most observers express disappointment with pricing in the market this year, particularly in light of the strength in the housing industry.

Price hikes, ranging from 2 cents to 4 cents per pound, have achieved some success, according to one producer, and another maintains that "most accounts did accept an increase."

In other quarters, however, producers say that for major customers the price increase has failed outright. The higher price "did stick through most of July, but started to fall apart toward the end of the month," says one.

Benzene contract pricing started the month of July at 60 cents par gallon, 10 cents per gallon higher than the August 1 level. The 5 cent per gallon August 1 benzene contract adjustment down to 70 cents per gallon was "the straw that broke the camel's back," says this producer.

As a result, he says, although 1 cent to 2 cents per pound of the increase remains for some customers, the most significant part of the market "has retreated back to June levels."

The phenol industry has often been described as highly competitive, and one producer asserts that some rivals "can't wait to give away" the price increase. Through most of July, there was some order in the market, he says, but more recently the situation has deteriorated.

Producers say that demand for the product has not been as strong as housing start figures would lead them to expect, since most phenol moves into the housing industry.

PHENOLIC RESIN MARKET

The phenolic resin market in particular, which accounts for about 45 percent of phenol consumption, "has not taken off as it should," comments a spokesman at USS Chemicals division of US Diversified Group.

Phenol producers say it is likely that resin producers are keeping inventory levels low, and that resin and/or plywood imports have been heavy. Imports of phenol actually have declined this year.

The USS Chemicals spokesman comments that, while expectations have not been met, phenol volume should be comparable to last year, with an industrywide operating rate of approximately 85 percent. The market is healthier than the pricing would indicate," he comments.

Georgia Gulf's 165-million-pound-per-year plant in Bound Brook, N.J. was reported down for part of July for maintenance. One industry source says that the company was compelled briefly to seek out material in order to meet commitments.

Producers expect to face more competition in the market in the early Fall when a facility in Canada comes on stream. The 60-million-pound-per-year phenol plant near Montreal, formerly owned by Gulf Canada, was idled around the beginning of the year when it was sold to a fuel marketer, sold to the Canadian government for a nominal sum and then turned over to an engineering firm.

Producers had voiced some skepticism over the likelihood that the plant would resume production in the near future because its adjacent cumene source had been idled.

However, an industry source says that a cumene contract has been signed with a US Gulf Coast producer. It is estimated that US producers currently export about 40 million pounds of phenol to Canada on an annual basis.

BTX — Shell Chemical cut its benzene contract price for August 1 by 5c. per gallon to 70c. per gallon, and the move was soon followed by Exxon Chemical Americas and the rest of the industry, trade sources report.

Following this change, however, came the unexpected agreement reached by the Organization of Petroleum Exporting Countries. As a result of this, crude oil and gasoline values increased, and basic aromatics pricing began to show signs of picking up. "There is a lot of confusion and volatility in the market," says an industry source.

The OPEC accord, although it may not hold up for long, "has caused people to make purchasing decisions" in the aromatics market, says one trader, and this is seen as contributing to a firming trend. Spot benzene is quoted between 88c. and 70c. per gallon, spot toluene is quoted between 58c. and 60c. per gallon, and spot xylene is quoted at 75c. per gallon.

PRICES TRENDLINES

WEEK ENDING AUGUST 8, 1988

CHANGES/UP
None

CHANGES/DOWN
None

AROMATICS INDEX

The Aromatic Organics Index reflects the prices of 14 representative materials in this sector and the quantity of each produced in 1985.

August 6, 1986	167.84
August 1, 1988	167.84
July 10, 1988	167.84
August 9, 1985	167.84

Chemical Prices Start on Page 32

CUMENE — Pricing fell approximately 1/2c. per pound the past month, primarily in response to lower benzene costs, sources say. The current price of 13 1/4c. per pound is reported holding fairly steady.

Observers say that there has been a noticeable decline in the volume of imported material this year. Bureau of Census figures show that the level of imports during the first half of this year was less than half the volume recorded for the first half of 1985.

Nonetheless, US cumene production in the first quarter of the year fell 14.7 percent from the first quarter of 1965. The dropoff in imports "is not necessarily leading to a pickup in domestic demand," says one supplier.

Along with the weakening of the US dollar, the reduction in imports is ascribed to strong European demand which has cut into the amount of European material available for the US market, and also attracted product from South America. "I'm not aware of seeing much (South American cumene) coming to the US this year," a supplier notes. The startup of a large bisphenol-A facility this year in Europe is seen as contributing to the pickup there in cumene demand.

CYCLOHEXANE — E.I. du Pont de Nemours & Co. has shut its 50-million-gallon-per-year Corpus Christi, Tex. plant for an estimated three to six months, trade sources report. The company says the plant will be closed until a pipeline supplying hydrogen from a nearby plant in Victoria, Tex. is completed.

Other producers are skeptical of such a pipeline's feasibility, and one says that the plant "may never come back on." The Victoria hydrogen is produced "on-purpose" and so is considerably more expensive than the byproduct hydrogen taken from the now idled chlorine and chlorinated solvents facilities in Corpus Christi.

It is noted Union Chemical's Beaumont, Tex. plant has been down the past couple weeks due to a catalyst problem. A total downtime of three weeks has been estimated, and it is believed that the situation is no more

Continued on Page 18

BISMALEIMIDES

Chemical Finance

Wickes Company Pursuing Owens-Corning

Wickes Companies, a Santa Monica, Calif.-based diversified company, has made an unsolicited offer to purchase Owens-Corning Fiberglas Corporation for $70 per share, or about $2.10 billion. Owens-Corning said that it would review the offer but indicated a negative response by saying that a broad restructuring would be among numerous alternatives to be considered. Restructuring is a critical and almost always successful method of defense, if carried far enough.

Agra Acquires Biological Consultants Inc.

Agra Industries, Ltd., Toronto, Canada, has acquired Biological Consultants Inc., of Birmingham, Ala., a consultant in the application of biological organisms to treat municipal, agricultural, industrial and toxic wastes. R.W. Norcross Jr. will continue as president of the company.

Int'l Technology Goes on Pacific Exchange

International Technology Company, of Torrance, Calif., has been listed on the Pacific Stock Exchange in San Francisco under the symbol "ITX." The company provides services for the assessment, mitigation and decontamination of situations involving hazardous substances. Revenues in the fiscal year ended March 31, 1986 were $207 million, up 34 percent from the previous year.

Rollins Acquires Environmental Control Technology

Rollins Environmental Services Inc., Wilmington, Del., has acquired the business and certain assets of Environmental Control Technology Corporation, Ann Arbor, Mich., for 20,161 shares of Rollins common stock. The acquired company will provide analytical services for Rollins' three hazardous waste incineration facilities.

Waste Management May Offer Equity In Two Units

Waste Management Incorporated, the largest chemical waste handler, is weighing the public offering of up to 20 percent of the equity in its chemical and nuclear waste businesses. The Oak Brook, Ill.-based company said that stockholders may realize greater values if these businesses are conducted in a separate publicly owned entity.

Reichhold's Ester Unit Going to Denka

Reichhold Chemicals Inc., White Plains, N.Y., has signed a letter of intent to sell its US specialty ester business to Denka Chemical Corporation, of Houston, Tex., in a cash transaction. Price was not disclosed. The transaction is expected to be completed within 90 days.

The agreement includes a manufacturing plant in Carteret, N.J.; the "Staflex" and "Barca" tradenames, along with licenses and technology. The product line comprises phathalates and adipates and other plasticizers, which Reichhold itself will continue to market through subsidiaries in Switzerland and Austria.

Greenwell Reinstates BOC, Brent Ratings

Greenwell Montagu Research Company in the UK has reinstated its "buy" recommendation on British Oxygen Company following a long period of weakness in the shares, and is again recommending purchase of the shares of Brent Chemicals Ltd., now that the price has drifted to a level below its instrinsic value. Greenwell is rating shares of Coalite PLC as a "hold" and Coates Brothers is called a "speculative buy." Imperial Chemical Industries PLC also is recommended.

SDS Biotech Completes TechAmerica Offer

SDS Biotech Corporation, a wholly-owned subsidiary of Fermenta AB, of Stockholm, Sweden, has successfully completed its tender offer for 4.35 million shares or approximately 51 parcent of the 8.5 million outstanding shares of TechAmerica Group Inc., at $4 per share. Some 5,887,345 shares were tendered. SDS Biotech, based in Painesville, Ohio, is a manufacturer of agricultural chemicals and various animal health products.

Uniroyal, Goodrich Merge Tire Lines

B.F. Goodrich Company and Uniroyal Inc. have completed the marger of their tire businesses with the formation of Uniroyal Goodrich Tire Company, based in Akron, Ohio, with annual sales of about $2 billion.

Hutton Likes Outlook for Hercules Incorporated

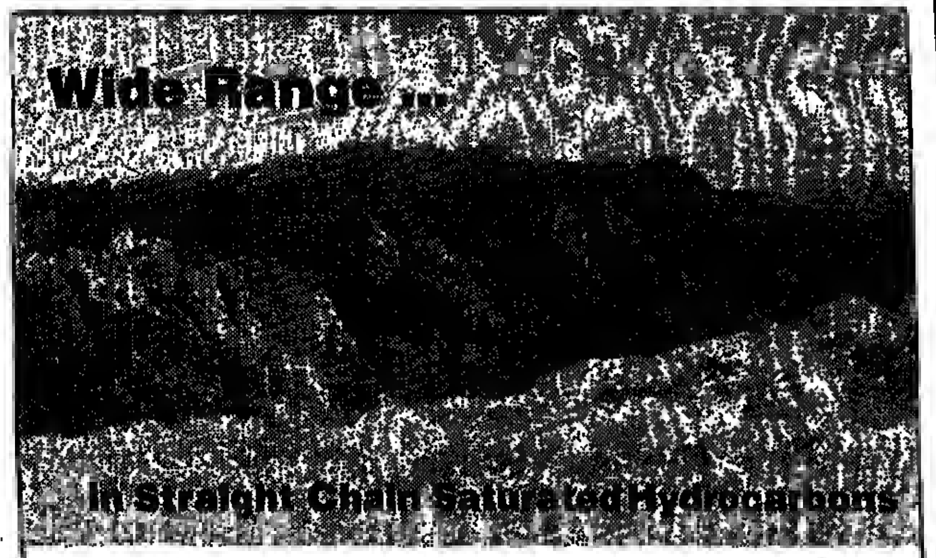
John P. Henry, chemical analyst at E.F. Hutton & Co., is rating the shares of Hercules Incorporated for "aggressive purchase" by short-term investors and "accumulate" for long-term investors. Hutton expects Hercules to earn $3.75 per share this year and $4 [illegible] in 1987, up from $2.40 per share last year. Hercules' strong prospects are enhanced by [illegible] upcoming joint venture for water soluble products with Henkel AG, of West Germany.

Oppenheimer Likes Koppers and Chemed Stocks

Koppers Company should earn $2 per share this year and $3 next year, following [illegible] of $3.75 per share in 1985, according to a report from Oppenheimer & Co. Oppenheimer [illegible] chemical analyst, Charles J. Rose, is keeping Koppers on his special research recommended list, and is also recommending the shares of Chemed Corporation, [illegible] should earn $2.30 this year and $2.75 next year, versus $2.21 per share in 1985. Rose has reduced his forecast for Nalco Company to $1.80 per share this year [illegible] and he sees only $1.75 per share next year, versus $1.87 in 1985.

Dow Chemical to Boost Share in Magma Power

Magma Power Company, Los Angeles-based geothermal energy devel[illegible] Dow Chemical Company has declared its intention to take as Magma Po[illegible] stock about $400 million in accrued contractual fees due to Dow. When [illegible] transaction will enlarge Dow's holdings in Magma Power to almost [illegible] Dow exercise additional options it holds in the future, the stake coul[illegible] percent. Before the latest action, Dow's Magma Power interest tota[illegible]



ALIPHATIC ORGANICS

VAM Pricing Could Firm Up As a Result of OPEC Move

Producera of vinyl acetate monomer say pricea for the material have slipped aomewhat since January 1, but at least one maker looks to the possible cut in OPEC oil production as a sign of a better pricing climate to come.

Last week, producers offered several perapectives on where pricing currently stands in the industry. Two makers said that 28 cents to 30 cents per pound, delivered, is roughly what an average, medium-sized account is currently paying. Another producer maintains that most material is moving ot 25 cents to 27 cents per pound.

Producer's were unanimous, however, in questioning the validity of a 21-cent price, f.o.b. Texas that has recantly been reported. One maker aays that that price, if available, would only be quoted to the very largest accounts, perhaps those taking in excess of 50 million pounds, and is not representative of the market.

Another maker emphasizes that the 21-cent price is f.o.b. rather than delivered, and customers paying this price would probably provide their own transportation.

PRICES HAVE DECLINED

In any event, prices have come down since January, by 1½ cents, according to one supplier, and by as much as 3 cents according to another.

Not surprisingly, the plunge in crude oil prices is at the heart of price weakness in VAM, according to producers. "I'm sure that aupply and demand play a role," says one, "but the major reason is hydrocarbons."

He tells the by now familiar story of chemicol makers who must contend with customer reaction to pricing at the gas pump and the resultant pressure on the prices of all crude derivatives.

Apart from the crude oil situation and a VAM overaupply, it's asserted that one producer may be contributing to price weakness by concentrating more on moving captive raw materials output than on obtaining acceptable prices for finished VAM production. The aasertion is denied.

Softening methanol prices also play a role, according to a marketer. "Certainly methanol bas taken a dive," he asserts. At the beginning of the yeor, methanol wos reported aelling at about 38 cents per pound (CMR, 2/3/88, pg. 17). Methanol was reported selling for approximately 30 cents per pound in July.

Overcapacity is an issue of some disputo among domestic makars. Ona supplier calls VAM "a commodity with tremendous world-wide oversupply," and continues that "there is more than adequate supply in the US because there has been a big export market." He asserts that the export market can be "as much as 600 million pounds," and likens this market to "the output of one large plant."

That becomes significant if exports decline and exporters are left looking for a place to put their product. The producer says the export market is currently seeing a price decline similar to that in the US market, and he suggests that "currently, everyone is concentrating on the US market.

"Some people who typically export VAM are trying to move product in the US," says a competitor, but he discounts the overall effect of this trend. "We have seen some materiol," he continues, "but whatever problems that will cause have already been seen."

Another supplier says that excess VAM capacity is not really the central issue right now. Rather he says, the limiting factor in the market is acetic acid capacity.

"There has been overcapacity for VAM for the last few years," he acknowledges, but he also points out that "acetic acid used to make VAM is running full out industry-wide." He asserts that "all VAM producers that produce acetic acid are running their acid capacity as hard as they can."

Thus, he concludes that "people aren't cutting VAM pricing to use more capacity."

A competitor feels that a strengthening may be close at hand for VAM, based on signs that OPEC will finally take action to shore up sagging oil markets. "Fundamentally it's the crude oil situation that is responsible for

PRICES TRENDLINES

WEEK ENDING AUG. 8, 1986

CHANGES/UP
None

CHANGES/DOWN
None

ALIPHATICS INDEX

The Aliphatic Organics index reflects the pricas of 20 raprasentativa materials in this sector and the quantity of each producod in 1985.

Aug. 8, 1988	222.80
July 31, 1988	222.80
July 11, 1988	222.80
Aug. 9, 1985	203.80

Chomical Pricas Start on Page 32

ALIPHATIC ORGANIC EXPORTS: JUNE

BUREAU OF CENSUS FIGURES IN POUNDS ON THE KEY ALIPHATICS

		JUNE QUANTITY	JUNE $ VALUE	MAY QUANTITY	MAY $ VALUE
Acetic Acid	lbs.	6,424,050	695,632	11,920,118	[illegible]
Acetone	lbs.	3,069,812	954,110	7,348,894	[illegible]
Acrylonitrile	lbs.	96,820,366	26,329,359	76,290,754	[illegible]
Adipic Acid	lbs.	8,782,611	2,548,862	9,269,393	[illegible]
Butadiene	lbs.	21,320,560	4,896,367	12,428,604	[illegible]
Butanol	lbs.	8,128,775	1,584,871	8,153,082	[illegible]
Butyl Acetate	lbs.	3,878,220	1,041,182	7,425,101	[illegible]
Caprolactam	lbs.	1,379,967	746,676	2,716,171	[illegible]
Chlorinated Hydrocarbons	lbs.	9,191,298	1,759,461	16,386,135	[illegible]
Ethanolamines	lbs.	16,143,956	8,257,609	12,420,079	[illegible]
Ethyl Acrylate	lbs.	6,124,713	2,404,542	5,895,666	[illegible]
Ethyl Alcohol	lbs.	53,877	109,236	120,152	[illegible]
Ethylene Dichloride	lbs.	15,699,513	803,847	58,206,196	[illegible]
Ethylene Glycol	lbs.	44,907,851	7,421,672	60,376,317	[illegible]
Formaldehyde	lbs.	1,905,617	309,632	1,855,724	[illegible]
Glycerine (Crude)	lbs.	391,416	155,326	296,256	[illegible]
Glycerine (Refined)	lbs.	380,097	256,009	506,196	[illegible]
Glycols	lbs.	3,154,569	1,940,195	5,482,606	[illegible]
Methanol	lbs.	3,992,969	1,371,277	6,249,711	[illegible]
Methyl Ethyl Ketone	lbs.	7,440,451	1,774,549	9,266,509	[illegible]
Methyl Methacrylate	lbs.	8,309,106	2,512,121	12,010,[illegible]	[illegible]
Methylene Chloride	lbs.	2,586,352	363,006	6,440,[illegible]	[illegible]
Perchloroethylene	lbs.	1,971,053	346,996	6,648,011	[illegible]
Polyethylene Glycol	lbs.	890,189	414,835	900,4[illegible]	[illegible]
Polypropylene Glycol	lbs.	18,061,967	7,291,867	26,851,[illegible]	[illegible]
Propyl Alcohol	lbs.	205,553,066	4,520,[illegible]	19,615,[illegible]	[illegible]
Propylene Glycol	lbs.	8,255,988	1,775,[illegible]	8,821,[illegible]	[illegible]
Propylene Oxide	lbs.	4,713,072	1,794,[illegible]	[illegible]	[illegible]
Trichloroethylene	lbs.	1,627,862	[illegible]	[illegible]	[illegible]
Vinyl Acetate	lbs.	35,793,020	6,87[illegible]	[illegible]	[illegible]
Vinyl Chloride	lbs.	89,[illegible],781	10,404,[illegible]	[illegible]	[illegible]

ALIPHATICS

current psychology," he aaya.

Ha auggests that a chaoga in the current weak oil market, which could be produced by ao OPEC agreement to cut production, could reverse that psychology.

A potential result could he firming in all darivatives markets, including VAM. "I think the OPEC settlement, at least on a temporary baais, plus the acetic production picture, could lead to a firming." In any eveot, he says that price decreaaes have halted for the moment.

The VAM industry ia basically mature, producers aay. Domestic damand totallad 2.1 billion pounds in 1985 and is projected to grow to about 2.2 billion pounds during 1986. Producers say they expect to see demand growth of hetween 1 and 2 percent per year ovar the next three to five years.

GLYCERINE — Production of cruda glycerine, including aynthetic, totalled 23.1 million pounds in June, according to Department of Commerce. That represents a 1.7-million-pound decline from the production level seen io June of 1985, and a 5.8 million pound decline from May 1988.

Producars' stocks of crude and refined glycerine stood at 40 million pounda at tha end of June, Commerce saya. Stocks at the end of June were up 2.2 million pounds from end-of-May levela, and up 15.4 million pounds from levels seen in June of 1885.

Glycerine imports amounted to 2.8 million pounds in June, compared to 4.1 million pounds during the previous month, and 5.3 million pounds in Juna of 1985.

As of the end of June, cumulative imports stand at 28.9 million pounds, compared to 18.8 million pounds during the same period in 1885.

At 800,000 pounds, exports in June were unchanged from the level of the previous month, but were down sharply from the June 1885 total of 3.8 million pounds. Cumulative exports, through June, stand at 6.8 million pounds, just over half of last year's total for the aame period.

Total domestic disappearance of glycerine was 22.9 million pounds, down from the May total of 28.3 million pounds, but above the June 1985 figure of 21.7 million pounds. Year-to-date domestic disappearance amounts to 174.5 million pounds as of June.

'Green Book' Advertisers

Advertisers in the OPD CHEMICAL BUYERS DIRECTORY ("Green Book"), sister publication of CHEMICAL MARKETING REPORTER, advise us that they are being solicited by Associated Business Directories of Winter Springs, FL, to advertise in that concern's Commercial Chemical Directory for 1987.

Accompanying its invoice-like statement, which the company insists is *not* a bill, is a tear sheet of the advertiser's insertion in the 1986 edition of the OPD CHEMICAL BUYERS DIRECTORY.

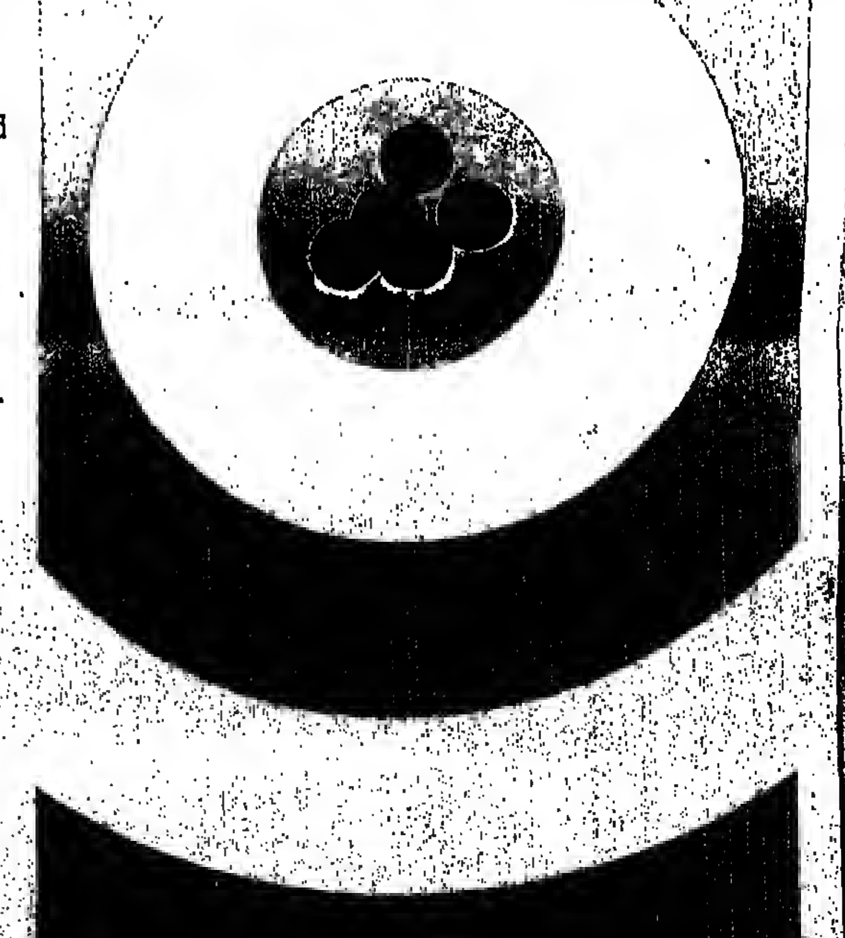
This is to notify all customers of Schnell Publishing Co., parent organization of both the "Green Book" and CMR, that (1) we have no connection with Associated Business Directories or its Commercial Chemical Directory, (2) use of advertising tear sheets taken from the 1986 "Green Book" was not authorized by us and (3) the purchase of advertising space from Associated Business Directories *WILL NOT GUARANTEE* placement in the 1987 edition of the OPD CHEMICAL BUYERS DIRECTORY.

Celanese Set to Sell Methanol to California

Celaoese Chemical Company haa signed "a letter of underatanding" with Applied Cogeneration to sell fuel methanol to Applied Cogeneration, which in turn will resell the methanol to industrial and transportation consumers in Southern California.

Applied Cogenerations aays it will focua its marketing activities on converting stationary industrial hoilers and turbines, fired-processa equipment and certain transportation sources to allow them to burn fuel-grade methanol. A company official saya concern over pollution in Southern California provides a "huge" market poteotial for clean burning alcohol to iodustrial power systems.

Applied Cogeneration is a 50-50 partnership between Applied Western Syatems, Inc. and Lionheart Reaources Corporation, ol Vancouver, B.C.



AROMATICS

Continued from Page 13

serious than that would indicate, since Union is said not to have attampted to obtain aupplies from other producars.

Chevron Chemical, which said on January 1 that it was leoving the business, saya it has since "seen a little more healthy environment" this year with Du Pont's shutdown and the elimination of half the industry'a 4c. per gallon price discount.

Consequently, the company's 36-million-gallon-per-year Port Arthur, Tex., plant, which had been running only "off and on (for) a coupla contract customers we were obliged to cootinue supplying," has recently been running closer to capacity.

With the 5c. per gallon benzene contract decrease, cyclohexane pricing fails 4.1225c. per gallon in accordance with the industry-wide pricing formula. The new prices range from Phillips Chemical Company's 65.40c.-per-gallon price to Texaco Chemical Company'a 84.40c.-per-gallon price.

DMT — Although feedstock paraxylene prices have held steady, dimethyl terephthalate pricing has dropped 1c. per pound in tha past three months, to 23½c. per pound from 24½c. per pound.

Producera say the lower price is a result of reduced energy costs and weak demand from the polyester fiber industry, whicb accounts for about 75 percent of DMT consumption. While a negative growth rate is expected this year for shipmeots to the polyester fiber market, producers are optimistic about demand from other sectora.

The PET container market "is booming these days," remarks one producer, and another projects a growth rate of 10 to 15 percent thia year. Demand from film, engineering, and specialty resin markets is said to ba growing modestly.

"The fiber area is much more mature" than these others, comments one producer. Sincs most material for fiber use is aupplied internally, be aays, the healthy growth rate in non-fiber DMT demand has led to a noticeable increase in the size of the merchant market.

Eastman Chemical, considered a "small player" in the merchant market by other producers prior to its withdrawal from contractual business in the firat quarter, says that it intends to supply the spot market if it has material availabla, but that internal requirements so far havo forestalled the exercising of that option.

NONYLPHENOL — Two producers who raised off-list pricing in early July by 1c. per pound, say the move was unsuccessful. When the prices were increased, it was said they were responding to rising phenol costs.

However, producera say that phenol pricing, after rising briefly, fell back to June levels. This is attributed to weakness in the benzene market during July and competitive pressures within the phenol industry.

Demand for nonylphenol, which is used in surfactants, lube oil additives, emulsifiers and antioxidants, is described as steady.

THIODIPHENOL — Crown Zellerbach Corporation says that earlier this yeor it resumed production at its 2-million-pound-per-year Camas, Wash., facility. When the plant went off stream last year, it was said thot the move waa permanent.

"Our chemical products division felt that the plant did not fit strategically" into company plans at the time, saya a spokesman. Since there has been no other producer of thiodiphenol active this decade, customers vigorously built inventories prior to the shutdown, the company source says.

Customers eventually were successful in persuading Crown Zellerbach to start up again. The current price of $3.35 per pound for shipments over 350 pounds is said to be slightly above the 1985 level.

The main use for thiodiphenol is reportedly as a larvicide intermediate. The company says that other uses are in dye manufacturing and wood preservation, and that potential end markets being looked at include adhesives, fire retardant plastics, and thermoplastic resins.

Industrial Biocides

Continued from Paga 4

ides develop responses to "data-call-in notices" for more than 700 biocidal chemicals registered in California. The California Department of Food and Agriculture issued the notices last January, in accordance with the state's Birth Defects Prevention Act of 1984.

The notices require registrants to submit data on certain toxic, oncogenic and reproductive effects of the registered pesticides. Companies that do not have the data must initiate studies and submit reports by specified dates. CMA estimates that costs for developing the required data could be $1.5-1 million per chemical.

Currently, the panel is also focusing its efforts on reauthorization of the Federal Insecticide, Fungicide, and Rodenticide Act; providing input in the development of EPA's upcoming anti-microbial testing requirements; and preparing to address upcoming state and Federal data requirements for "inert" substances used in the manufacture of pesticides.

BASF Plans Sale Of Colorants Unit

Polychrome Chemicals Corporation, Bloomfield, N.J., says it is in the process of negotiating a definitive agreement with BASF Corporation for the acquisition of most of the assets of the RBH industrial Colorants business in Bound Brook, N.J.

On completion of the purchase, Polychrome intends to operate RBH in generally the same manner as in the past. Polychrome Chamicals operates two other facilities in New Jersey and two in Illinois, all serving the coatings industry.

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DRUGS & FINE CHEMICALS

Guar Gum Supplies Plunge; Oil Services Industry Drops

As predicted, guar gum supplies have dwindled this year. Spokesmen agree that catastrophic conditions were prevented only by a diminishing requirement within the depressed oil services industry.

Last Fall's guar crops in India and Pakistan, the world's leading sources, were poor because of unfavorable weather. Guar import statistics for 1986 reflect this. Through May, 29.3 million pounds of guar had antered the US, about 45 percent less than the 53.7 pounds which came hare through May 1985.

The US imports almost all of its guar requirement. While it is common for companies to build their inventories, most spokesman agraa that virtually all 1986 imports are being sold immediately.

In a typical year, claim spokesmen, present supplies would fall far short of demand. However, the oil services industry, which uses about half the guar sold in the US, is buying on a hand-to-mouth basis because of declining activity and plunging oil prices. According to Hughes Tool Company, 721 rigs were active last week. Although the number of active rigs has slightly risen in each of the last three weeks, the total is far below the 1,995 active rigs at the end of December. Moreover, the active rig total only began to rise after reaching an all-time low of 663 on July 14.

OIL BUSINESS DECLINES

Therefore, "tightness is not a major problem (because) the oil business has fallen off significantly." Says a apokesman, "Any shortages in the crop were almost negated because the oil volume wasn't there."

Othar markets for guar, such as the textile, food and paper markets, are flat, say spokesmen. Currently, Federal measures are being considered to aid the faltering US textile industry, although these measures are opposed by the Reagan Administration. Even if measures are taken, says one spokesman, the guar industry probably wouldn't benefit much. "It could possibly halp, but not to a major extent," he says.

Because of low demand overall, customers are obtaining material. However, notes one spokesman, the market is "sensitive, delicate. Thera's just eoough to take care of all needs."

Now the industry awaits the next crop. Iodustry spokesman ara hesitant to apeculate so soon (the height of the season is in September and October), but aome claim that preliminary signs are not encouraging. While it's the monsoon rains of September and October which help the crop flourish, rain is needed now to help tha seeds garminata, and soma spokesmen iodicate that thesa rains ara iata. They should ha coming oow, or hava even slightly passed." Another spokesmao suspects that "the rain hasn't heen that good." Othera, though, say there is no reason to expect a poor crop.

Ona spokesman claima that the price of "splits," or raw matarial, is often an accurate indicator of what ia in store for the iodustry. He claims that when tha price of splits comes down, tha rainfall has been adequate. Conversely, the price rises when rainfall ia not adequate. If the price remains steady, ba says, that means the situation is "spotty" and could go eithar way. Currently, split prices are steady which, according to thia spokesman, indicates potential difficultiea. Ha concludes that "If we get a second (consecutive) bad crop, it's going to be tough."

Split prices are quoted at less than $1,000 per metric ton by several spokesman, with one saying the price is closer to $900. Prices for the various grades of guar gum range from 50 cents to $1 per pound, with many observers narrowing the ronge to between 50 and 75 cents per pound. These prices usually vary widely, and depend on quality and quantity. Prices have fallen slightly since tha beginning of 1986, but are still above last yaar's levels. Guar gum prices doubled when it bacame apparent supplies would be tight. At the time, say trade sources, it was oot axpected that the oil services industry would be so dapressed, and companiaa worried about meeting demand. Spokesman say that if the next crop does turn out to be good, prices should aoften more.

Currant US consumptioo of guar gum is estimated between 100 million and 120 milliou pounds. Two apokesmen speculata that about 60 percent of tha raw material is processed ovarseaa, with the rest processed in tha US.

PRICES TRENDLINES

WEEK ENDING AUG. 8, 1986

CHANGES/UP

None

CHANGES/DOWN

None

DRUGS INDEX

Tha Drugs & Fina Chamicals index raflects the prices of 10 rapresantativa matarials in thia sector and tha quantity of aach produced in 1985.

Aug. 6, 1986	211.16
Aug. 1, 1986	211.16
July 11, 1986	211.16
Aug. 7, 1985	211.16

Chemical Prices Start on Page 32

IVERMECTIN — Merck & Co.'s MSD

DRUG & FINE CHEMICAL EXPORTS: JUNE

BUREAU OF CENSUS FIGURES ON THE KEY DRUGS:

		JUNE QUANTITY	JUNE $ VALUE	MAY QUANTITY	MAY $ VALUE
Antibiotics:					
Ampicillin and salts, bulk	gms.	17,761	1,246,769	110,108	1,201,3639
Erythromycin	gms.	48,996	5,925,351	48,233	7,237,6974
Penicillin HSPF	blu.	3,767,057	4,866,212	114,231	3,676,6549
Penicillins, G salts, bulk	blu.	1,670,053	926,447	1,263,961	413,6231
Tetracycline	gms.	1,856	2,691,239	11,916	6,945,7761
Aspirin	lbs.	812,878	693,454	162,771	251,8113
Caffeine and deriv.	lbs.	76,444	129,613	13,161	46,0409
Citric acid	lbs.	650,046	396,722	440,966	475,7146
Opium alkaloids and deriv.	lbs.	1,186	167,559	4,459	314,8821
Hormones:					
Corticosteroids, nspf	lbs.	4,968	6,762,756	6,460	6,669,8057
Nonsteroid hormones	lbs.	4,698	656,269	2,341	1,616,9571
Prednisolone and esters salts	lbs.	4,219	4,719,527	4,250	5,405,0653
Steroid hormones and synthetic	lbs.	18,425	3,432,705	21,941	4,885,4965
Sulfonamides, bulk	lbs.	100,039	1,407,876	56,329	645,0047
Vitamins:					
Ascorbic Acid	lbs.	119,809	863,635	105,762	427,3561
Vitamin A and Pro-vitamin A, bulk	lbs.	104,126	196,986	66,964	70,6077
Vitamin B_1 (thiamine)	lbs.	6,325	64,239	14,689	128,3522
Vitamin E	lbs.	3,086	34,578	1,229	23,1243
Vitamin B_{12}	lbs.	74,343	762,135	81,345	1,280,9921
D and Dl pantothenic acid	lbs.	250	3,249	4,410	37,4204
Niacin and niacinamide	lbs.	29,634	75,468	43,190	105,6712
Vitamins, nspf	lbs.	160,963	816,532	120,642	676,1631

DRUGS & FINE CHEMS

Agvet division has received Food & Drug Administration approval for the first product to control both the internal and external parasites of swine, the company says.

"Ivomec," an invermectin-based injection for swine, is the only product to control roundworms and lungworms by means of injection, while also controlling external parasites like lice and mange mites.

Previously, according to a Merck spokesman, animals had to be dipped into or sprayed with two products, one for internal control and the other for external control. Merck already has patents for ivermectin-based injections for cattle and horses in the US, and also has approval overseas for treating sheep and external parasites of swine.

FDA's approval was given July 22, and Merck's spokesman says the injection is now beginning to be marketed. The product's price will average 80c. per cc, which Merck's spokesman says is less than the cost of using two different products to do the same thing. He adds that injections allow for precise doses based on the animal's weight, and also subject the animals to less stress than they would be by being sprayed and/or dipped.

PHENYLPROPANOLAMINE — The American Medical Association recently adopted a report recommending a delay in formulating guidelines for the use of PPA in diet preparations. AMA says this will be its policy until additional studies requested by the Food & Drug Administration are completed. AMA's report says that when the studies are completed, the Tentative Final Monograph (TFM) will be published in the Federal Register and the AMA can develop guidelines then.

FDA's decision regarding PPA, due a few months ago, is still pending. A spokesman says no target date has been set.

Meanwhile, price is said to be stable, with lists in the high $20-per-kilogram region. Actual selling prices are said to be lower, depending on the quality of the product.

SODIUM ALGINATE — There continues to be an oversupply of sodium alginate.

Most of the US requirement is supplied by Merck & Company, the only domestic source. However, much of the product is imported, and the rate of imports is increasing. Through June, 2.5 million pounds of sodium alginate have come to the US, compared to 2.18 million pounds for the comparable period in 1985. Leading exporters to the US are England, Canada, Norway and France.

Demand is called steady. Prices range from $8 to $6.75 per pound for NF grade, $3 to $5 per pound for FCC grade and $1.85 to $3.50 per pound for technical grade.

Firms to Fight US Textile Policy

The House voted to back President Reagan's trade policies last week, sustaining his veto of a bill that would protect the textile industry from foreign imports and require the administration to seek limitations on worldwide copper production.

The vote was 276-149, eight votes short of the two-thirds majority needed to override the veto. President Reagan has vetoed 47 measures and only five have been overridden by both the House and Senate.

The outcome signals the end for the controversial bill that the domestic textile industry said was needed to save it from surging import levels. The administration said the legislation would trigger retaliation by America's trading partners.

John N. Gregg, chairman of Avtex Fibers and leader of an industrial coalition that supported the bill, said fiber producers will continue to fight imports.

"America's fiber, textile, and apparel industry and its two million workers have lost the battle, but not the war, against unfair trade. As long as there's a US Congress empowered to stop the flood of unfair imports, we'll fight to gain its support," said Mr. Gregg.

The bill would have rolled back textile and apparel imports from the three largest exporters — Taiwan, Hong Kong and South Korea — and frozen imports from nine other nations, most of them in the Pacific Rim.

It also would have directed the President to negotiate voluntary production restraint agreements with the major foreign copper producers in order to limit worldwide output over the next five years. Restraint agreements with Chile, Zambia, Zaire, Peru and Canada likely would have required these countries to reduce their current production by 6-7 percent.

The bill was passed overwhelmingly last year — 255-161 in the House; 60-39 in the Senate — but President Reagan vetoed it in December saying it was protectionist, would invite trade retaliation and would raise consumer prices.

"This was a bad bill last year and it's a bad bill now," said Rep. John Miller, R-Wash. "It's bad for America's consumers...It's bad for America's workers...And it's bad for America's friends in the Far and Middle East."

Rep. Sam Gibbons, D-Fla., said the textile industry was the "most highly protected" in the US and maintained the industry is healthy.

White house officials and congressional supports said recent textile-import pacts with Taiwan, South Korea and Hong Kong, along with a renegotiated multilateral fiber agreement, showed the administration was heeding industry's concerns.

But supporters of the override, including many Southern Republicans, said the surge in imports over recent years had cost thousands of jobs in the textile industry and was evidence of a flawed trade policy. They said the new agreements would not help the industry.

ChemClear Wins $1.3MM Contracts

ChemClear, Inc., Wayne, Pa., says it has received more than $1.3 million in waste treatment contracts in the first seven months of its diversification into field service operations.

The company, which operates four waste treatment facilities in the Northeast and Midwest, expanded its field activities in January to service industries requiring mobile crews for commercial waste cleanup of lagoons, contaminated tanks and drum storage areas.

Carl Cording, ChemClear's president, says the expanded field service operation has grown continuously since its inception, with July accounting for almost one-third of sales since the beginning of the year. "July has been a breakthrough month for this division," he says. "It is impossible to predict the actual impact field service operations will have on our total revenues, but I see it as a significant factor in 1986 and beyond," he adds.

Superfund Tax Seen Unfair

Continued from Page 5

aware," Mr. DiBone said in a letter to the secretary.

"Given your opposition to broad-based taxes, the effect of your letter is to leave crude oil and feedstock taxes as the only source of funding," the API executive wrote.

"There can be little doubt that many in Congress will use your letter to claim the administration supports increased feedstock and crude oil taxes as the only viable option," Mr. DiBona added.

API and Chemical Manufacturers Association have jointly recommended that general revenues be used to finance the bulk of hazardous waste site cleanup. Because Environmental Protection Agency has identified more than 8,000 potentially responsible dumpers from nearly every industry, the trade groups say the only appropriate alternative to general revenues is some other form of broad-based tax.

Although the tax issue is the only remaining unresolved matter in the nearly two-year superfund reauthorization debate, Capitol Hill observers say quick action by the tax conferees is unlikely. With Sen. Packwood and House Ways and Means Committee Chairman Daniel Rostenkowski (D-Ill.), tied up with tax reform, action on superfund will likely have to wait until Congress returns from its Summer recess, they say.

EPA administrator Lee M. Thomas says the agency needs funds by Sept. 1 or he will have to notify contractors that they would be laid off in 30 days. Already some contractors, which carry on much of the cleanup program's work, are laying off employees because of the low level of activity, he says.

Rep. John Dingell (D-Mich.), chairman of the superfund conference committee, says interim funding through appropriations, to be paid back later through superfund taxes, is "a possibility, not a probability."

Congress approved an emergency appropriation of $150 million for superfund May 30, but EPA has nearly depleted those funds. Because Congress failed to complete the reauthorization before taxes to support the cleanup program expired Sept. 30, 1985, EPA has delayed work at more than 200 sites across the country.

Industry, environmentalists and EPA have all expressed general support for the non-tax provisions of the new superfund bill agreed to by conferees on July 31.

"We felt all along there was material for a compromise," says a CMA spokesman. "We're glad the bill is moving again because the program has been nearly dead for almost a year."

Whether the chemical industry supports the bill, he adds, depends on how the all-important tax question is resolved. "The pressure is on to get a good broad-based tax to pay for this," he says.

Rep. Dingell, who was accused by environmentalists of supporting a "polluters' bill" during the divisive six-month conference, called the final bill "a superb piece of legislation." He says the bill is "hard on industry but fair."

Mr. Thomas agrees that some provisions will be difficult to implement, but adds, "Overall, I think it's strong legislation, and it's a law we can administer."

Gas Price Fall Only Temporary

Aithough interstate pipelines reduced their overali cost of gas in 1985, much of the reduction resuited from temporary measures, a survey by the Interstate Naturai Gas Association of America says.

The survey of INGAA member-companies shows that pipelines reduced their overall cost of gas last year by 25 cents per MMBTU, an 8 percent decline from 1984.

The report aays this decrease in gas costs occurred following partial wellhead decontrol on January 1, 1985, when indefinite prica escalators in gas contracts were putting substantial upward pressure on wellhead pricea.

The INGAA report saya domestic price effects accounted for 51 percent of tha 1985 price decreaaa and imports accounted for 37 percent. Changes in natural gas purchass patterns accounted for an additional 12 percent of the total prics decrease.

The report notes that a full one-third of the reported changes were due to temporary contract renegotiation and temporary relaase of gaa, meaaures "averting the immediate effeets of contract problems but not solving the problema."

INGAA's policy analysia department saya in tha report that "with imports accounting for a disproportionate shara of the 1985 price reduction and one-third of the price changes resulting from atopgap measures, much of the market distortions and rigid gaa purchase contracts remained at year-end 1985"

The report concludea that "although pipelines made soma progress in controlling purchased gas costs, more contract renegotiation with producera is needed. Tha contract problems of 1985 were apparently only postponed, not aliminated."

Pesticide Reform

Continued from Page 7

stronger role for the atates when contamination in a drinking well exceeda the guidanca levels, and graater authority for EPA in the event that a atate falla to act to enaure that contamination is reduced or that peopls do not drink the tainted water.

The committec also adopted an amendment by Sen. Heims to restrict atates' suthority to set mora stringent atandards than the Federal government for certain pesticids reaiduea on food.

The exemption, however, ia limited to pesticides registered by EPA sincs April 1985. Sen. Helms explained that EPA has a complete data hase on these chemicals, and their aafety hos already been provsn.

The ponel narrowly approved, 9-7, a motion by Sen. Richsrd Lugsr, R-Ind., to delete provisions from the House bill requiring EPA to revoke food tolerances for pesticides whose use has been hanned in the US. In effect, the tolerance revocation would prohibit the importation of food containing any residucs of a hanned pesticide.

Sen. Lugar argued that such a requirement would be viewed by exporters aa "a non-tariff trade borrier" that would invite retsiiation against some US-approved food chemicsls.

Boots Enters

Continued from Paga 3

operation. Mr. Theohaid says the two sales forces make a "very good fit" hecsuse both call on the general praciitioner.

Mr. Theobald says Flint provides Boots with tha products, sales and profits to support the launching of new products and a aalea force expansion. Fliot's mojor product is a drug used to treot thyroid deficiencies, called "Synthroid". It accounts for around 80 percent of Flint's total salea.

Boots currenily haa two products under development. One, a heart drug called "Flosequinan", is in phase II trials in Europe and the US. Boots hopes to have the drug on the US market hy 1990.

Another drug in the Boots pipeline is an antidepressant, which is said to he faster acting than others currently on the msrkst.

With a strong US presence, Boots is aiming to capture a larger slice of the American market, which accounts for 28 psrcent of prescription drug sales worldwide, compared to the UK, which accounts for just 3 percent.

The purchase agreement helween Boots and Baxter Travenol is expected to he completed in Sepicmber.

Waste Facility Sites Debated

Continued from Page 3

whsn it amended the Resource Conservation & Recovary Act two years ago.

Rsp. Florio said tha disputa betwesn the Carbida unit and the citizen's group la evidence of tha need for clear-cut EPA standards to determine where waste sites should be located.

"These regulations will go to the haart of environmenial decisions now heing mada hy ststes across tha country," aaid ths congressman. "It'a absolutsly essential that EPA issue these regulations thst are aimed at ensuring that all hazardous and toxic waste facilitiea ara not located where they will cause environmsntal damaga."

Mr. Lower said Unison's technology for removing PCBs from electrical transformers "can achieve the highly desirable goal of sliminsting the threat which 300 million pounds of PCBs may pose for the environment, now and for the future,"

Through ths company'a technology, he said PCBs are removed from transformers and dsstroyed, and the transformers can continus to operste free of the risks associated with their current lsvels of PCBa. Risks associaled with landfilling PCB transformera are avoidad.

PCB REMOVAL PROCESS

In Unison's process, Mr. Lower said the original electrical fluid, typicslly containing 50 to 70 perceot PCBs, is removed from the transformer on-sita and aent directly to an EPA-permitted incinerator, where it is destroyed.

The transformer is then filled with TF-1, a proprietary interim fluid that leachsa the PCB's out of the internal components of the transformar. Finally, the transformer is filled with a permanent dielectric fluid and reclassified to non-PCB status in accordance with EPA regulations.

Mr. Lower aaid Unison's recovery center, nearing completion in Henderson, hss heen desigoed to ssparate the remaining PCB's from the TF-1 fluid. These PCBs ars also sent to EPA-permitted incinerators to he destroyed.

The Hsnderson site was chosen, he explained, becsuse of its central geographic locstion between the majority of the transformers to hs services and the three EPA-permitted incinerators.

"While tha Hsnderson recovary contar falls under TSCA (Toxic Substances Control Act) regulations, our review of RCRA indicstes there srs no controla imposed on RCRA-regulsted storaga or treotmsnt facilities thst would csuse the Henderaon facility to he sited, designed or operated differently than wa currently plan," Mr. Lower said.

"In short," he added, "we are convinced that the center will not have an adverse impact on its environment—either short or long term."

Mr. Lowar also noted that tha facility's location would comply with RCRA requirements relating to proximity to fault lines and flood plains. He said the Henderson site is abova ths 100-foot flood plain of the Ohio River and miles from the New Madrid geologic fault line.

Jans M. McConathy, president of a citizen's group in Henderaon, called Unison's technology a "black box" and accused the company of withholding important information from the community.

"Unison will not tell us the chemicals heing uaed in their process," she aaid.

Sunflower Oleic

Continued from Page 7

intend to sell crude oil, oleic acid and oleic acid derivatives.

Mr. Grasser says the crude sunflower oil developed by SVO Enterprises offers a higher oleic acid concentration (in excess of 80 percent) than does premium tallow (73-75 percent oleic acid concentration). He says the oil will be marketed to firms willing to pay a premium for a higher concentration of oleic acid.

In addition to challenging other natural sources of oleic acid for the high end of the market, Mr. Grasser says that high oleic acid derivatives will eventually challenge the dominance of low-priced petrochemicals in the motor oil additives market.

In this market, petroleum-based products, such as ethylene oligomers, had displaced products based on natural oils, due to the sharp decline in crude oil prices.

Mr. Grassers says that high oleic acid derived chemicals will also be sold as lubricants in strip mills, hydraulic fluids, paper sizing and other industrial applications.

While Mr. Grasser concedes that sunflower oil derivatives still cannot compete with ethylene oligomers at present, he believes the pendulum will eventually swing the other way, with petroleum-based products rising in price, and high oleic acid derivatives made from sunflower falling in price.

Currently, Mr. Grasser says SVO Enterprises' high oleic crude sunflower oil is priced at 50 cents per pound. However, he anticipates the price will fall next year, since the company hopes to more than double the 40 million pound crude oil output earmarked for 1986. Eventually, he projects high oleic acid crude sunflower oil production will top 100 million pounds per year.

National Distillers Buys Texgas Corp.

National Distillers & Chemical Corporation last week announced the completion of its purchase of Texgas Corporation, the propane marketing subsidiary of Houston-based Union Texas Petroleum, for approximately $185 million, $150 million in cash and the remainder in notes payable in January, 1987.

NDCC chairman John Hoyt Stookey stated that, "The acquisition of Texgas will further strengthen NDCC's retail, industrial and wholesale propane marketing businesses operated by Suburban Propane Gas Corporation. With the addition of Texgas, Suburban Propane will market propane to approximately 1.1 million customers in 44 states."

PERFUMES & FLAVORINGS

Grapefruit Oil Supplies Tight; Industry Awaits the New Crop

Grapefruit oil supplies are extremely tight throughout the world, especially in the US, due to what sources call a skyrocketing demand. Because no new material will be available until Florida starts its crop in December or January, the situation is not expected to change this year.

Sources insist that the past season's crop was a good one, but just not strong enough to handle demand. "Crops weren't bad," says one broker, "demand soared .... Grapefruit oil is hard to get." Another agrees, saying that "demand is very unusual .... it's a dramatic thing."

Sources single out the beverage industry as the main reason for increased demand. Beverage demand very strong, says a broker. Another points out that consumption of beverages containing grapefruit oils is increasing.

A dealer says price for California material is about $2.25 per pound, although he admits the market is volatile. The dealer comments that in March, prices were between $1.25 and $1.50 per pound, but now 75 to 80 percent of his sales are at the $2.25 price.

Florida grapefruit oil is even scarcer than the California oil, and is priced at $2.75 per pound. One reason that Florida material is even harder to find is that Florida's season ends earlier than California's.

Folded grapefruit oil prices are also on the rise because of tightness. Last week, 5-fold Florida grapefruit oil rose to $19.50 per pound, as did 5-fold Israeli grapefruit oil. Also, 10-fold Israeli grapefruit oil costs $33.50 per pound. Prices are for 25-pound purchases. A broker says that now, it is often difficult, or impossible, to accomodate new customers.

Price for redistilled nootkatone is stable at $295 per pound.

Imports are behind last year's pace through June. Thus far, 103,000 pounds of grapefruit oil have entered the US, opposed to 111,000 pounds for the same period in 1985. The leading exporters to the US are Israel and Belize. Imports from Israel are down to 56,000 pounds from 88,000 pounds, while imports from Belize have risen to 45,000 pounds, from 35,000 pounds. Small amounts are also coming here from various countries in Western Europe.

One broker mentions that Mexico is starting to provide samples of grapefruit oil, and should be entering the US market next season.

LEMON OIL — The lemon oil market is described as sluggish, and price is soft as a result.

Italian lemon oil is especially weak, and fell by $1 per pound, to $12.50 per pound for a 22-pound purchase. A broker says supplies are plentiful, which is one of the reasons for the decrease.

Another reason, says one source, is that consumption figures for some beverages are down. For example, he cites the "Slice" scare in New York City recently. A person claimed to have tampered with the soft drink, causing the company to temporarily take it off the shelves. "Slice" is back on the shelves now, but the source says the incident created bad publicity for the drink.

Meanwhile, 5-fold lemon oil remains at $48 per pound.

ORANGE OIL — Prices rose for the 20-fold orange oil, says a broker, as domestic sources face increased production costs.

Israeli 20-fold orange oil rose to $22 per pound last week, while the 5-fold and 10-fold oils were priced at $4.75 and $8.95 per pound, respectively. Florida's 5-fold orange oil remains at $4.25 per pound.

Another broker comments that inexpensive low-fold material is coming in the US from Brazil, which is why other low-fold orange oils are not firming. All prices are for 25-pound quantities.

PRICES TRENDLINES

WEEK ENDING AUG. 8, 1986

CHANGES/UP

Cassia, KA 3.50/4.00, 1-5c. per lb.
Cassia, KA 3.00/3.50, 7-8c. per lb.
Cassia, KB 2.25, 8c. per lb.
Cassia, KC 1.60, 4c. per lb.
Cumin Seed, Chinese, 3c. per lb.
Cumin Seed, Turkish, 4c. per lb.
Fennel Seed, Egypt, Fancy/Recleaned, 3c. per lb.
Fennel Seed, Turkish, Extra fancy, 4c. per lb.
Fennel Seed, Turkish, Recleaned, 3c. per lb.
Mace, Padang Siftings, 25-50c. per lb.
Oregano, Greek 30, Mesh, 10c. per lb.
Oregano, Turkish 30, Mesh, 22-27c. per lb.
Poppy Seed, Turkish, 4c. per lb.
Poppy Seed, Australian, 4c. per lb.
Turmeric, Peruvian, acc. qual., 1-3c. per lb.

CHANGES/DOWN

Caraway Seed, NY Recleaned, 4c. per lb.
Caraway Seed, Fancy/Recleaned, 2c. per lb.
Lemon Oil, Italian, $1 per lb.
Mandarin Oil, Italian, $1 per lb.
Pepper, Black Brazilian, 2c. per lb.
Pepper, Lampong, 1c. per lb.
Pepper, Malabar (August), 5c. per lb.
Pepper, Malabar (Sept.), 3c. per lb.
Pepper, Muntok (August), 4c. per lb.
Pepper, Muntok (Sept.), 1c. per lb.
Tagetes Oil, $10 per lb.
Thyme Oil, FCC (Red), $1 per lb.
Turmeric, Alleppey FAO, 5-6.50%, 2c. per lb.
Turmeric, Alleppey FAO, over 6%, 2c. per lb.

PERFUMES INDEX

The Perfumes & Flavorings Index reflects the prices of 11 representative materials in this sector and the quantity of each supplied in 1985.

Aug. 8, 1986	71.00
Aug. 1, 1986	71.00
July 11, 1986	71.00
Aug. 7, 1985	82.44

Chemical Prices Start on Page 32.

SEED & SPICE IMPORTS: APRIL

A SELECTION OF STATISTICS FROM THE BUREAU OF CENSUS.

		APRIL	MARCH	1986 TO DATE	APR. '85
Caraway seed	lb.	621,880	623,893	2,736,140	716,307
Celery seed	lb.	227,677	402,841	1,6226,396	240,087
Cinnamon, unground	lb.	103,286	270,824	826,705	178,123
Cloves	lb.	170,088	446,466	1,277,175	227,450
Coriander	lb.	622,384	660,661	2,077,022	403,761
Cumin seed	lb.	326,149	940,023	3,116,086	746,212
Fennel seed	lb.	366,467	550,843	1,866,810	186,604
Ginger root	lb.	353,521	640,371	2,431,638	654,153
Mustard seed, whole	lb.	7,611,870	7,161,170	30,679,392	6,896,679
Nutmegs, unground	lb.	360,626	280,300	1,607,163	232,027
Origanum, whole	lb.	624,750	826,840	3,080,780	622,162
Paprika	lb.	212,606	2,126,946	7,372,207	2,846,432
Pepper, black, unground	lb.	8,312,136	6,780,831	27,886,710	4,630,997
Pepper, red, capsicum	lb.	142,945	1,457,791	305,692	1,781,672
Pepper, white, unground	lb.	241,217	610,036	2,206,229	895,016
Pimento, unground	lb.	723,713	280,5[illegible]	[illegible]	67,800
Sage unground	lb.	502,889	339,302	1,186,725	304,51[illegible]
Turmeric	lb.	418,879	189,867	933,271	150,960
Vanilla beans	lb.	305,204	271,476	631,469	76,754

COATINGS & PLASTICS

Acrylic Sheet Mart

Continued from Page 5

cations, have not been affected, sources say. USX says prices for its continuous-cast sheet run at around $1 per square foot. Polycast, Inc. gives a price of $1.34 per pound for cell-cast sheet.

Total US capacity for cell-cast, continuous-cast, continuously-processed and extruded acrylic sheet is said to be about 375 million pounds, roughly half of which represents cell-cast capacity. Some of this cell-cast capacity has been mothballed, and may be permanently shut down at some point in the future. Producers agree that at least 20 percent of the cell-cast capacity is excess.

In discussing demand, producers prefer to group all sheet types together, describing a total acrylic sheet market (including cell-cast, continuous-cast, continuously-processed and extruded acrylic sheet) of 315 million pounds, of which 280 million pounds is comprised of flat sheet and the remainder of prismatic formed sheet. 150 to 155 million pounds of this total is said to be composed of continuous and cell-cast sheet, with the remainder by continuously-processed and extruded sheet.

Total US capacity for molding and extrusion powder and pellet production is said to be about 250 million pounds, with 165 million pounds for molding powder and the balance for extrusion pellets.

TOTAL MARKET DEMAND

Total demand for the molding and extrusion pellets and powders is about 216 million pounds, of which 66 million pounds represents high-impact grades and 150 million pounds total merchant demand for molding powders. At least 35 million pounds of molding powders are produced for internal use by sheet producers in formulation of continuously processed sheet.

Some sources fear that planned sheet expansions will create an overcapacity problem in the molding/extrusion end of the market, with the possibility of long-term depressing effects on pricing. Since 1984 prices for these grades have remained stable.

Truckload prices for Continental Polymers molding/extrusion compounds are 91 cents per pound for "CP-51"; $1.02 for CP-923 and $1.09 for CP-025 and $1.24 for high-impact CP-1000. Similar prices for Rohm and Haas products are given, with 91 cents per pound for clear general-purpose grade (colored grades costing an additional 5 cents per pound) and up to $1.27 per pound for truckload quantities of high-impact grade.

Overall growth in the molding/extrusion segment of the market has been dominated by the construction and automobile industries. Due to an increase in auto imports this segment of the acrylics market has been down by as much as 4 percent this year.

Although certain small markets for recently developed applications including molded acrylic compounds used in medical instrumentation components such as connectors and chest-drainage units, and molded videodisk components are enously showing double-digit growth, and are expected to continue at this rate, they are overshadowed by a flat growth picture overall, producers say.

PLASTICS ADDITIVES

AZODICARBONAMIDE — The market for azodicarbonamide blowing agents has been fiercely competitive for the past two years, producers relate.

One small producer says that current selling prices range around an average of $1.65 per pound for the largest volume customers, a substantial discount from the listed price of $2.60 per pound. A spokesman for the firm complains that they have been hurt by Japanese, French and Korean imports. (One Japanese firm which exports to the US gives a selling price range of $1.40 to $1.88 per pound, depending on grade and quantity.)

Although imports have affected larger producers as well, there is a feeling among major suppliers that the situation is stabilizing, and prices may soon be on the increase, due in part to the change in yen-to-dollar value ratio.

Overall demand has been increasing at GNP growth rate, roughly 4 percent from last year, a source relates.

One potential high-growth market is that of blowing agent compounds. Although azodicarbonamide is FDA approved, it is dusty and difficult to work with. Sources report that both Nortech and Polyvel, Inc. are offering net (azodicarbonamide compounds containing 20 to 25 percent of the agent) for use in

Continued on Page 30

PRICES TRENDLINES

WEEK ENDING AUG. 8, 1986

CHANGES/UP

None

CHANGES/DOWN

None

COATINGS INDEX

The Coatings & Plastics Index reflects the prices of 13 representative materials in this sector and the quantity of each produced in 1985.

Aug. 8, 1986	308.4
Aug. 1, 1986	306.4
July 11, 1986	306.4
Aug. 7, 1985	306.4

Chemical Prices Start on Page 32

COATING & PIGMENT IMPORTS: MAY

CENSUS BUREAU REPORTS ON THE TOP PAINT MATERIALS.

		MAY 1986 QUANTITY	MAY 1986 $ VALUE	APRIL 1986 QUANTITY	APRIL 1986 $ VALUE
Antimony oxide	lbs.	2,767,059	1,794,070	2,370,311	1,893,204
Carbon black	lbs.	6,254,246	1,822,750	10,493,001	3,063,409
Chrome colors:					
Chrome oxide green	lbs.	226,676	230,391	574,492	532,493
Molybdate orange	lbs.	177,500	116,664	116,460	112,976
Yellow	lbs.	209,240	142,146	342,016	253,316
Zinc Yellow	lbs.	166,262	98,026	260,000	144,713
Cobalt Oxide	lbs.	19,469	165,791	116,412	1,069,021
Cuprous Oxide	lbs.	80,000	69,273	79,683	77,452
Iron blues	lbs.	626,611	627,364	492,607	601,622
Iron oxides, hydroxides, nsp'f	lbs	40,000	3,266	116,540	16,940
Synthetic:					
Black	lbs.	141,732	36,886	118,571	66,022
Red	lbs.	1,169,264	373,567	1,079,686	304,340
Yellow	lbs.	2,242,916	466,502	2,666,077	546,402
NSPF	lbs.	1,615,174	1,055,582	1,094,292	696,664
Litharge	lbs.	1,269,913	226,796	1,660,292	272,422
Red Lead	lbs.	62,000	17,630	67,000	16,667
Shellac, bleached	lbs.	36,553	94,466	66,046	167,204
Stick buttonlac, other lacs	lbs.	60,563	170,222	90,792	196,671
Seed lac	lbs.	627,816	577,132	474,460	601,287
Titanium dioxide	lbs.	26,644,973	16,606,363	32,603,639	12,614,26[illegible]
Ultramarine blue	lbs.	437,471	431,786	[illegible]	576,405
White lead, basic carbonate	lbs.	1,157	5,399	160,127	73,098
Zinc Oxide (lead free)	lbs.	336,974	112,571	7,624,456	2,269,723

HEAVY & AG CHEMICALS

Water Fluoridation Market Still Feeling the Supply Bind

The Center for Disease Control (CDC) said last week that water fluoridation has resumed in major cities such as Cincinnati and Philadelphia that lacked fluoridation chemicals early this Spring.

All involved in the business, however, say that the tight supply situation continues, creating higher prices and some product allocation for municipalities and aluminum fluoride producers.

The main cause of tightness is generally acknowledged to be low operating rates for the phosphate fertilizer business. Hydrofluosilicic acid (HFS), the primary fluoridation chemical, is recovered as a byproduct of phosphoric acid production.

In particular, sources cite the continued closure of Farmland Industries' Green Bay, Fla., phosphate fertilizer plant as tightening HFS supplies. A Farmland spokesman says a start-up date for the plant has yet to be chosen. One source feels that the date may be over a year away.

Also cited are a two or three week maintenance turnaround at Freeport Chemical, and minor production problems at Conserv's plant.

Other major HFS producers include Gardinier, Texasgulf, W.R. Grace and La Roche Industries (formerly USS Agrichemicals). Not all phosphate producers recover HFS.

SSF IN TIGHT SUPPLY

Also in short supply is sodium silicofluoride (SSF), which is produced from HFS and used in the dry fluoridation systems often found in smaller cities. Producers in this business are Gardinier, Kaiser Chemicals and Chemtech Industries. According to one source, two SSF producers have left the market over the past two years, victim of the poor margins that existed prior to the present situation.

CDC says that at present, all major cities are fluoridating. A spokesman acknowledges, however, that spot shortages, especially for smaller systems, have been reported. In addition, he feels that overall the fluoridation chemical market was tighter this Summer than it was in 1982, when HFS supplies were also low.

One municipal water manager, whose city was not fluoridating four months ago, says full fluoridation has since resumed. He adds, however, that some delivery delays have been experienced.

Similarily, one buyer for an aluminum producer says material is available, but admits that his company is not able to purchase as much as it would like. The aluminum industry produces aluminum fluoride from HFS as part of its cryolite refining process.

Some fluoride chemical producers say they are currently selling on an allotment basis; one says he continues to get calls requesting spot sales that he must turn down.

Prices have risen as a result of the supply situation. Producers increased HFS prices in mid-Summer to $140 per ton for 100 percent acid, f.o.b. plant, from $100 per ton. Similar SSF increases, to $18.75 per hundredweight and $400 per ton, soon followed.

Two weeks ago, Freeport Chemical hiked prices again, to $190 per ton, effective September 1. Other producers say they are considering the market situation.

Producers claim that during healthy seasons for phosphate fertilizers HFS supplies are much looser and prices are poor. When high and low price periods are averaged out, they say, overall returns are only moderate.

Prices to municipal users vary and are generally higher than producer prices, sources report, since most HFS and SSF goes through distributors first.

Prices to aluminum fluoride makers, however, are generally lower, reflecting long-term contract arrangements and the acknowlegement on the part of HFS producers that the aluminum industry is depressed.

CDC sponsored a meeting in June to discuss averting fluoride chemical shortages in the future. Among other things, CDC recommended the installation of storage equipment by consuming municipalities. Based on the observation of the effects of previous shortages, a three-month reserve is considered sufficient.

A CDC spokesman points out that such an investment for a smaller city might actually prove cost effective because it would allow for the reception of bulk and consequently lower priced shipments. For larger cities, storage facilities would not reduce costs significantly but would insure steady supplies.

It is generally acknowledged that storage equipment installation is not in the interest of suppliers. Municipal contracts tend to be awarded on a lowest bid basis. Consequently, there is little loyalty to suppliers on the part of municipalities and no supplier incentive exists to make long-term investments.

Estimates of HFS demand vary. One source sees industry capacity of over 100,000 tons per year, on a 100 percent basis, but feels current production is closer to 75,000 tons per year, for all end uses, because of low fertilizer industry operation rates.

Another puts HFS demand by the water fluoridation business between 16,000 and 18,000 tons par year. SSF demand from both water treatment and industrial accounts is estimated between 18,000 and 20,000 tons annually.

CDC estimates that water fluoridation is growing at about 2 percent per year. This is slightly higher than the growth of the population using public water, which in turn is slightly higher than population growth in general.

CDC says 62.8 percent of the US population on public water systems receives fluoridated water. This translates into 54.8 percent of the population as a whole.

PRICES TRENDLINES

WEEK ENDING AUG. 8, 1986

CHANGES/UP

Sodium Ferrocyanide, 8c. per pound

CHANGES/DOWN

None

HEAVY & AG INDEX

The Heavy & Ag Chemicals Index reflects the prices of 18 representative materials in this sector and the quantity of each produced in 1985.

Aug. 8, 1986	113.69
Aug. 1, 1986	113.69
July 11, 1986	113.69
Aug. 7, 1985	113.69

Chemical Prices Start on Page 32

FERTILIZER CHEMICAL OUTPUT: MAY

CENSUS BUREAU NUMBERS IN SHORT TONS ON KEY FERTILIZERS

	MAY	APRIL	[illegible]
Ammonia, syn., anhyd.	1,269,247	1,266,160	[illegible]
Amonium nitrate	494,767	529,262	[illegible]
Ammonium nitrate/urea solutions	196,179	228,505	[illegible]
Monoammonium phosphates	74,991	156,106	[illegible]
Other ammonium phosphates	62,496	62,032	[illegible]
Ammonium sulfate	191,532	165,761	[illegible]
Diammonium phosphate	[illegible]	650,537	[illegible]
Nitric acid	631,009	[illegible]	[illegible]
Phosphoric acid	766,703	822,519	[illegible]
Sulfuric acid	3,112,124	3,211,667	[illegible]
Superphosphate, concentrated	192,589	233,260	[illegible]
Superphosphate, normal & enriched	19,207	35,461	[illegible]
Superphosphate, other phosphate fert.	1,031,144	1,137,416	[illegible]
Urea	605,462	601,639	[illegible]

BASES & SALTS

ARSENIC TRIOXIDE — Sources say that since Asarco, Inc. pulled out of the business in mid-1985 the market has been dominated by Boliden Metall AB of Sweden and Industria Minera Mexico SA.

A limited amount of material from Metallurgie Hoboken-Overpelt of Belgium is also on the market. Cominco of Canada is said to be aggressive lately, and a French producer is also said to be active.

In addition, one source says that Asarco sold from stockpile through May of this year, although Asarco now says it has withdrawn totally from the business.

Demand is called good by one supplier, based on the strength of the wood preservative industry, arsenic trioxide's major end use. Its use as a cotton defoliant and desiccant is not doing as well, he says.

The material is produced as a byproduct of copper mining, when the mining takes place in arsenic-rich ore. One observer predicts that more producers may be entering the market in years to come as foreign governments become more concerned with the proper disposal of mining byproducts. Brazil, Chile and Greece are cited as possible entrants. The Asarco material was 95 percent pure. Sources say that 99 percent material is now more prevalent and preferred because it involves less handling and has less of a tendency to clog processing equipment.

Prices are thought by one source to be between 42c. and 45c. per pound f.o.b. warehouse. Another source agrees, but adds that this is for large quantities and subject to fluctuation based on supply/demand and currency exchange situations.

One source says that while the gap left by Asarco's exit was for the most part quickly filled, the company's extensive warehouse network was ideal for filling requirements of smaller accounts, some of which are at present undersupplied.

SODIUM CHLORATE — KemaNord, Incorporated has announced new list prices for its sodium chlorate crystal to be shipped in bulk. The new prices reflect a divison by region as follows: Northern Zone price is $315 per ton, delivered, and the Southern Zone price is $335 per ton, delivered.

The Northern Zone includes the states of Virginia, West Virginia, Kentucky, Missouri, and Kansas and North to the Canadian border. The Southern Zone is the territory south of that.

These prices are effective immediately for spot customers, and as terms permit for contract customers. The new list prices replace the old uniform list price of $420 per ton f.o.b., freight equalized.

Hercules Building Sizing Agents Unit

Hercules Incorporated has begun construction of an 80-million-pound-per-year facility to produce its new lines of "Neuphor" and "Hi-phase" emulsion sizing agents at its Hattiesburg, Miss., plant. The new plant should be operational by the first quarter of 1987.

According to a company spokesman, the new facility should provide significant new flexibility for the production of rosin-based emulsion sizing products. "Within the past year, similar new facilities were brought on line at the company's Kalamazoo, Mich., Portland, Ore., and St. Jean, Quebec, Canada plants.

COATINGS & PLASTICS

plastics formulation. The compounds are easier to work with, and are said to be gaining increasing acceptance by plastics manufacturers.

PRIME PIGMENTS

CADMIUM PIGMENTS — Effective July 28, Harshow-Filtrol, Inc. increased selling prices for its codmium sulfide and sulfoselinide pigments by on overage of 2 percent, compony spokesmen say.

Current selling prices for maximum quantities of representative pigments are: "Cadmium Lemon" (Yellow No. 30) at $3.06 per pound, up 6 cents per pound from its previous price, "Cadmium Red" (Red No. 80) at $5.40 per pound, up 10 cents from its previous price, and "Light Orange" (Orange No. 1405) up 20 cents per pound from its previous price, to $10.00 per pound.

Although other producers have not yet announced price increases, they describe increased pressure to do so.

Producers who compound cadmium material exported by the UK and West Germany complain that the cost of imported material is up, due to environmentol regulations abroad.

Sources explain that demand has stabilized since the early '80's, when demond was down due to whot one producer describes as "undue end-user concern about heavy metal content." Use of cadmium pigments is said to be growing in production of specialty engineering polymers and alloys, (particularly ABS and its alloys), in requiring high-heat stability and light fastness.

In 1984, only 4 million pounds of cadmium pigments were produced; demand was between 5.5 million and 8 million pounds, with tha remainder supplied by imports. One producer expects this year's to be 0 million pounda.

There is some overcapacity both domestic aod worldwide; one source believes that total domestic capacity utilization rate is less than 60 percent of nameplote. This growth is due to increased demand in high-heat engineering resins.

CADMIUM SULFIDE — Asarco Inc. has rescinded its May price increases of 10 cents per pound for cadmium sulfate, a company apokesman reports. The current list price is now $5.00 per puund for largest-volumo quantities (2000 lbs and over, f.o.b. Denver).

CHEMICAL PRICES

WEEK ENDING AUGUST 8, 1986

This chemical prices section contains spot quotations and/or list prices of suppliers of chemicals and related materials on a New York or other indicated basis. The listings are based on price information obtained from suppliers. Note that posted prices do not necessarily represent levels at which transactions actually may have occurred. They do not represent bid and asked prices, nor a range of prices over the week. Price ranges may represent quotations of different suppliers as well as differences in quantity, quality and location. All matters under this heading are fully covered by copyright.

An index of weekly chemical market reports is on the back cover.

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Product	Unit	Price	High
Abies siberica oil, cns.	lb.	15.00	-
Acetaldehyde, 99%, tanks, frt. alld.	lb.	.37	-
Prices 1c. higher in West.			
Acetaminophen (see N-Acetyl-p-aminophenol)			
Acetanilide, tech, flaked, bgs, t.l., f.o.b. works	lb.	1.29	-
Acetic acid, tech., tanks, dlvd. E	lb.	.25	-
Acetic anhydride, tanks, dvd. E	lb.	.43½	-
Acetic anhydride prices 1c. higher in West.			
Acetoacetanilide, dms., t.l., dlvd.	lb.	1.29	-
Acetoacet-o-anisidide, dms., t.l., dlvd.	lb.	2.70	-
Acetoacet-o-chloroanilide, dms., t.l., dlvd.	lb.	2.85	-
Acetoacet-o-toluidide, dms., t.l., dlvd.	lb.	1.68	-
Acetoacet-m-xylidide, dms., t.l., dlvd.	lb.	3.33	-
Acetone, tanks, dlvd. E.	lb.	.25	-
dlvd. Zone 2 (Calif.)	lb.	.27	-
dlvd. Zone 3 (W. of Rockies excluding Calif.)	lb.	.27	-
Acetonitrile, tanks, frt. alld.	lb.	.53	.54½
Acetophenetidin (see Phenacetin).			
Acetophenone, tech., tanks, f.o.b. works	lb.	.78	.85
perfume grade, extra, cns.	lb.	2.15	-
N-Acetyl-p-aminophenol, c.l., t.l. works	kilo	5.95	6.64
Acetylene black, imp., 50% compressed, 12½-lb. bgs. c.l., t.l. frt. extra	lb.	.88	-
100%, 25-lb. bgs., same basis	lb.	.95½	-
Acetylene tetrabromide, tanks, f.o.b. works	lb.	.97	-
Acetylsalicylic acid, USP (see Aspirin).			
Acetyltributyl citrate, bulk, f.o.b. works	lb.	1.28	-
Acetyltriethyl citrate, bulk, f.o.b. works	lb.	2.06	-
Acrolein, tech., tanks, works	lb.	.62	-
Acrylamide, solid, t.l. works	lb.	1.00	-
soln., 100% basis tanks, works	lb.	.74	.77
Acrylic acid, glacial, reg., tanks, dlvd.	lb.	.97	-
tech., tanks, frt. alld.	lb.	.60	-
Acrylonitrile, tanks, works	lb.	.39½	.46½
Acrylonitrile-butadiene-styrene resin, high-impact, nat., t.l., dms., dlvd.	lb.	1.05	1.09
medium-impact, nat., same basis	lb.	.94	.98
low-impact, nat.; same basis	lb.	.79	-
Adipic acid, resin grade, bulk, hopper cars, frt. equald.	lb.	.57	-
bgs., t.l., c.l. frt. equald.	lb.	.59	-
Agar USP, powd., 60 to 100 mesh., dms.	lb.	9.50	9.95
Alcohol, syn. C-8 to C-10, tanks, f.o.b. works	lb.	.38	-
C-12 to C-13, tanks, dlvd.	lb.	.57	.59
C-14 to C-15, tanks, dlvd.	lb.	.57	-
C-16 to C-18, tanks, dlvd.	lb.	.60	-
Aldehyde, C-6, dms.	lb.	4.10	5.70
C-7, dms.	lb.	1.95	-
C-8, dms.	lb.	4.30	5.30
C-10 dms.	lb.	4.30	5.35
Algin (see Sodium alginate.)			
Alkali blue, dry, flushed, 110-lb. dms, dlvd.	lb.	3.72	3.83
Alkali blue prices 1c. higher W. of Rockies.			
Allspice Guatemalan / Honduran, bgs.	lb.	1.00	-
Jamaican, bgs.	lb.	1.05	-
Allyl alcohol, tanks, f.o.b., Bayport, Tex.	lb.	.90	-
Allyl bromide, 500-kilo dms. 2,000 lbs. or more, works	lb.	5.50	-
Allyl caproate, 25-lb. cns.	lb.	3.90	4.50
Allyl chloride, tanks, f.o.b. works	lb.	.65	-
Allyl isothiocyanate, bots.	lb.	5.40	6.90
Almond oil, ertl., bitter (see Benzaldehyde.)			
Almond oil, nat. bitter, NF f.f.p.a. bots.	lb.	3.50	9.60
sweet	lb.	1.24	1.50
Aloe, Cape, cs.	lb.	2.00	-
powd., cs.	lb.	2.25	2.75
Curacao, kgs.	lb.	2.60	-
powd., kgs.	lb.	3.00	-
Aloin, NF, dms.	lb.	9.00	8.70
Alum, ammonium, tech. gran., bgs., c.l., t.l., works	100 lb.	35.00	-
FCC powd., fiber dms., works	100 lbs.	55.00	-
Alum, potassium, tech. gran. bgs., c.l., t.l., works	100 lbs.	35.00	-
FCC powd. fiber dms., works	100 lbs.	55.00	-
Alumina, activated, gran., 100-lb. bgs., 40,000-lb. min. c.l., works	ton	921.00	-
calcined, bulk, same basis	ton	854.00	-
100-lb. bgs., same basis	ton	380.00	-
hydrated, white, bulk, same basis	ton	190.00	-
100-lb. bgs., same basis	ton	224.00	-
Aluminum acetate, basic, dms., l.c.l., works	lb.	3.25	-
Aluminum chloride, anhyd., soln., 500-600 lb. dms., c.l., t.l., works, frt. equald.	lb.	.50	.55
bulk, same basis	lb.	.45½	.49½
semi-bulk bins, same basis	lb.	.49	.63
Aluminum chloride, coml., soln., 32° tanks, works	100 lbs.	15.00	-
ret. dms., c.l., works	100 lbs.	12.00	-
non-ret. dms., same basis	100 lbs.	20.00	-
Aluminum formate, dibasic, liq. 8% Al_2O_3 t.l., works	lb.	.55	-
Aluminum hydrate (see Alumina, hydrated)			
Aluminum hydroxide, dried, gel, NF, 75-lb. dms., c.l., t.l., works	lb.	2.75	3.50
Aluminum metal, 99½% or more, 50-lb. pigs., 30,000-lb. lots, frt. alld.	lb.	.78	-
Aluminum oxide amorphous (see Alumina, calcined).			
Aluminum paste, leafing grade, std., lining, 2,400 lb. lots, dlvd.	lb.	1.40	-
lining, extra-fine, same basis	lb.	1.99	2.14
Aluminum phenolsulfonate, purif., 100-kilo dms., t.l.	kilo	6.48	-
Aluminum powder, leafing grade, std. lining, 2,400 lb. lots, dlvd.	lb.	3.17	-
extra fine, lining, same basis	lb.	4.04	-
Aluminum stearate, bgs., c.l.	lb.	1.25	1.37
Aluminum sulfate, coml., grd., 100 lb. bgs., c.l., works, frt. equald., basis 17% Al_2O_3 East and Gulf Coasts	ton	185.00	-
West Coast	ton	217.80	-
liq., tanks, N.E. same basis	ton	145.00	-
iron-free, dry, bgs., c.l. same basis	ton	300.00	-
liq., tanks, same basis	ton	225.00	265.00
Aluminum sulfate, USP, gran., dms.	lb.	-	.337
Aminoacetic acid, USP, dms., 20,000 lbs., f.o.b. works	lb.	2.12	-
tech., t.l., same basis	lb.	1.98	-
p-Aminobenzoic acid, 1,000 kilos or more, dms., f.o.b. works	kilo	9.60	10.10
2-Amino-4-chlorophenol dry and grd., 14,000 lbs. or more, frt. alld.	lb.	5.79	-
Aminoethyl ethanolamine, tanks, frt. collect	lb.	1.33½	-
N-Aminoethyl piperazine, tanks, f.o.b., frt. collect	lb.	1.05	-
2-Amino-2-ethyl-1,3-propanediol dms., t.l. f.o.b. works	lb.	1.82	-
2-Amino-2-methyl-1-propanol, 95%, dms., c.l., t.l., f.o.b. works	lb	.95	-
tanks, f.o.b. works	lb	.89	-
o-Aminophenol, dms., f.o.b. Charlotte, N.C.	lb	3.95	-
p-Aminophenol, t.l. dms., f.o.b. Raleigh, N.C.	kilo	7.15	-
p-Aminosalicylic acid, USP, 50-kilo dms., t.l.	kilo	18.50	-
Ammonia, anhyd., fertilizer, wholesale, tanks, dlvd. Midwest terminals	ton	165.00	170.00
tankcars, f.o.b. Gulf Coast	ton	90.00	95.00
aqueous, 29.4% NH_3, anhyd basis, tanks, frt. equald. E. of Rockies	ton	260.00	315.00
Ammoniacal liquor (see Ammonia, aqueous).			
Ammoniac sal, galvanizing grade, bgs., c.l., f.o.b. works	100 lbs	29.60	-
Ammoniac sal. white (see Ammonium chloride coml.)			
Ammonium biborate, gran., dms., c.t. works	lb.	.90	-
Ammonium biborate powder 15c. per lb. higher.			
Ammonium bicarbonate, 300-lb. dms., c.l., works	100 lbs	29.00	-
bgs., c.l.	100 lbs.	25.00	-
Ammonium bichromate, photo-litho grade, gran. 100-lb. dms., l.t.l. works	lb.	2.00	-
Ammonium bifluoride, bgs., t.l., works	lb.	.70	-
Ammonium bromide, dom. NF, gran., dms., c.l., t.l., f.o.b. works	lb	1.31	-
Ammonium chloride, white, tech., fine gran., bgs., c.l., works	100 lbs.	19.00	-
USP, gran., dms.	lb.	.40	.53
Ammonium citrate, dibasic, 250-lb. dms. f.o.b. works	lb.	2.79	-
Ammonium dimolybdate, approx. 85%, 24,000 lbs. or more	lb.	5.48	-
Ammonium fluoborate, tech., dms., c.l., t.l., works, frt. equald.	lb.	1.79	-
Ammonium heptamolybdate, cryst., dms., 24,000 lbs. f.o.b. works	lb.	5.57	-
Ammonium lauryl sulfate, tanks, f.o.b. works	lb.	.29	.32
Ammonium lignin, sulfonate, bulk, f.o.b. Hoquiam, Ore.	ton	72.00	-
Ammonium nitrate, dom., fertilizer grade, 33.5% N, bulk, S.E. dlvd.	ton	130.00	135.00
Ammonium oxalate, tech., fine, gran. 300-lb. dms., t.l., f.o.b. works	lb.	1.42	1.99
Ammonium pentaborate gran. bgs., c.l., works	lb.	.75	-
Ammonium pentaborate powder 20c. per lb. higher.			
Ammonium persulfate, 225-lb. dms, 24,000 lbs. or more, f.o.b. works	lb.	.58	-
55-lb. bgs., same basis	lb.	.58½	-
Ammonium phosphate (see Di- and monoammonium phosphates).			
Ammonium silicofluoride, dms. c.l., t.l., works	lb.	.30¾	-
Ammonium sulfate, lg. gran., bulk, c.l., works	ton	80.00	90.00
std., coml., bulk, f.o.b. works	ton	60.00	70.00
tech., bgs., c.l., t.l., works	ton	108.00	120.00
Ammonium sulfide, liq., 40-44% tanks, 100% basis, frt. equald.	ton.	460.00	-
Ammonium sulfocyanide, tech. (see Ammonium thiocyanate).			
Ammonium thiocyanate, tech., cryst., bgs., c.l., works	lb.	1.02	-
tech soln., 50%, tanks, frt. equald.	lb.	.03	-
Ammonium thiosulfate, photographic, 60%, tanks, f.o.b. works	lb.	.13	-
Ammonium zirconyl carbonate, soln., bulk	lb.	.72	-
Amyl acetate, primary mixed isomers, tanks, dlvd.	lb.	.57	-
Amyl alcohol, primary mixed isomers, tanks, frt. ald.	lb.	.46½	-
Amyl cinnamic aldehyde, dms.	lb.	2.35	2.60
p-tert-Amylphenol, bulk, works	lb.	.81	1.03
Amyris oil, dms.	lb.	11.50	12.25
Anethole, tech., dms.	kilo	10.20	-
USP, dms.	lb.	3.05	4.00
Angelica root oil, bots.	kilo	700.00	-
Aniline, tanks, f.o.b.	lb.	.33	.35½
Anise oil, dms.	kilo	11.75	-
Anise seed, Egypt, bgs	lb.	.83	-
Spanish, bgs	lb	.94	.97
Turkish bgs	lb.	.62	.60
Anisic aldehyde, cns., dms	lb.	4.60	5.40
o-Anisidine, tmp. dms., dlvd	lb.	2.27	-
p-Anisidine, imp., cast solid, dms., works	lb.	1.90	-
flakes, same basis	lb.	2.25	-
Anthranilic acid, tech. 40-lb. dms., t.l. frt. alld.	lb.	1.70	-
Antimony fluoborate, liq. conc., 175-lb. dms., t.l. works	lb.	3.02	-
Antimony metal, bxs., c.l., mines	lb.	1.35	1.39
Antimony oxide, high tint, bgs, c.l., frt. ald. t.l., flakes	lb.	1.40	1.50
Antimony trichloride, anhyd., solid, dms., t.l. works	lb.	3.60	-
Apomorphine hydrochloride, NF, bots.	gm.	15.00	-
Apricot kernel oil, dms	lb.	2.05	-
Arabic gum, powd., bbls	lb.	1.85	2.15
spray dried	lb.	2.00	2.50
USP grade	lb.	8.75	9.25
Aromatic petroleum solvents (see Solvent, naphtha, petroleum aromatic)			
Arsenic, crude (see Arsenous trioxide).			
Aryl-t. res (see Naphthol, aryl-red)			
Arsenous trioxide, 99%, bulk, c.l., f.o.b. warehouse	lb.	.42	.45
Asbestos (see talc, fibrous)			
Ascorbic acid, USP, 100 kilos, dlvd.	kilo	9.00	10.50
Ash, black (see Barium sulfide)			
Asphalt gilsonite (see Gilsonite)			
Asphalt petroleum cutback, tanks, E Coast	gal.	.86	-
emulsion, tanks, tankwagons, E. Coast	gal.	.88	-
steam-refined, 40-300 penetration, tanks, tankwagon	ton	170.00	-
steep roofing grade, bulk tankwagon	ton	175.00	-
Aspirin, USP, cryst., powd., 250-lb. dms, c.l., f.o.b.	lb	1.95	-
10% starch granulation, white, 250-lb. dm, c.t., f.o.b.	lb.	1.97	-
15% starch granulation, white, same basis	lb	2.80	-
Freight equald. shpt. identical quantity over standard route from N.Y., Phila., Midland, Mich., Chicago & St. Louis			
Atropine sulfate, USP, bots	oz	10.00	11.00
Avocado oil, dms.	lb	4.00	4.50
Azelaic acid, tech., 50-lb bgs., t.l., c.l., dlvd	lb	1.23	-
Azo orange, bbls., dlvd.	lb.	4.60	-
Azo yellow, 10 G, bgs., dlvd. E. of Rockies	lb.	4.40	-
Azo G yellow pigment, bgs., same basis	lb.	2.45	-

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Product	Unit	Price	High
Bacitracin, USP, non-sterile, one billion units or more	million units	6.30	6.80
Barbital, NF, 50-kilo dms., dlvd.	kilo	22.50	-
Barbital-sodium, NF, 50-kilo dms. dlvd	kilo	23.00	-
Barite, dry-grd., Southern, off-color, coarse, bgs., c.l., f.o.b. mines	lb.	.09	.11
water-grd., white, bgs., c.l., f.o.b. works	lb.	.13	-
unbleached, extra-fine, pigment grade, c.l., f.o.b. works	ton	160.00	-
Barium carbonate, precip., bulk, c.l., works, frt. equald.	lb	.25	-
bgs., same basis	lb.	.25½	-
photo grade, bgs., same basis	ton	510.00	-
Barium chlorate, 100-lb. dms., 1-10 ton lots, works	lb.	1.04	-
Barium chloride, tech., cryst., bgs., c.l., works	ton	470.00	-
anhyd. drums c.l., same basis	ton	590.00	-
Barium chloride, purif., cryst. 400-lb. dms., works	lb.	3.78	-
Barium monohydrate, 55-lb. bgs., c.l., t.l. f.o.b. works	100 lbs.	46.00	-
octahydrate, cryst., bgs., same basis	100 lbs.	33.00	-
Barium nitrate, 100-lb. bgs., t.l., works	100 lbs.	32.50	-
Barium oxide, grd., dms., c.l., dlvd.	100 lbs.	31.25	-
tote bins, same basis	100 lbs.	50.00	-
Barium peroxide, 700-lb. dms., c.l., t.l., works	lb.	.30	-
Barium stearate, bulk, t.l., f.o.b. dest.	lb.	1.05	-
Barium sulfate, tech. (see Barite and Blanc fixe).			
Barium sulfate, USP, X-ray diagnosis grade, powd., 25 kilo bgs., 10,000 kilo lots	lb.	.58½	-
Barium sulfide (black ash), dms., c.l., works	ton	460.00	-
Basil Egyptian	lb.	.75	.85
French	lb.	.88	.90
Basil oil, Comores	lb.	90.00	-
Basil oil, Grand Vert	lb.	45.00	-
Battery acid, t.l., f.o.b., works	ton	52.00	70.75
Bauxite, calcined, refractory grade, 87%-88% Al_2O_3, Baltimore & Mobile	metric-ton	229.28	-
Bay oil, NF, 55-60%, dms.	lb.	10.50	15.00
Bayberry wax, bgs.	lb.	2.70	3.00
Beeswax, refd., bleached white, bricks, 100-lb. ctns.	lb.	3.10	3.20
white, slabs, 100-lb. ctns.	lb.	3.05	3.10
yellow, bricks, 100-lb. ctns.	lb.	3.00	3.10
yellow, slabs, 100-lb. ctns.	lb.	2.95	3.05
Bentonite, dom., c.l. bags, f.o.b. works	ton	43.50	-
Benzaldehyde, NF, dms.	lb.	1.25	-
tech., dms., c.l., t.l.	lb.	.73	.83
Prices are 4c. per lb. higher West of the Rockies.			
Benzene, indust. or nitration, barges, f.o.b.			
Baton Rouge, La.	gal.	.70	-
Baytown, Tex.	gal.	.70	-
Beaumont, Tex.	gal.	.70	-
Catlettsburg, Ky.	gal.	.70	-
Chicago district	gal.	.70	-
Chocolate Bayou, Tex.	gal.	.70	-
Clairton, Pa.	gal.	.70	-
Corpus Christi, Tex.	gal.	.70	-
Deer Park, Tex.	gal.	.70	-
Houston district, spot	gal.	.68	.70
Wood River, Ill.	gal.	.70	-
Benzene hexachloride, 99% gamma isomer (see Lindane).			
Benzidine orange, powd., bgs., dlvd.	lb.	4.90	9.70
liq., containers, dlvd.	lb.	3.39	3.89
Benzidine yellow, AAA, bgs., dlvd.	lb.	5.60	6.05
AAOA, bgs., dlvd.	lb.	7.36	7.40
AAOT, bgs., dlvd.	lb.	5.95	6.20
Benzocaine, USP, dms., 1,000 kg. lots, f.o.b., works	kg.	10.00	11.50
Benzodihydropyrone, dms.	lb.	12.50	-
Benzoic acid, tech., bgs., c.l., t.l., f.o.b. works	lb.	.55	.59
USP cryst., dms., ton lots same basis	lb.	1.73	1.75
Benzoin gum, Sumatra, cs.	lb.	1.80	-
Benzophenone, N.F., 1,000 lbs. or more, f.o.b.	lb.	3.50	3.60
N.F., 1,000 kilos or more, f.o.b.	kg.	7.45	-
tech, 1,000 kilos or more, fob works	kgs.	4.35	-
2,2-Benzothiazyl disulfide (see Mercaptobenzothiazyl disulfide).			
Benzotriazole, flake, dms., 1,000 lbs. or more, f.o.b. works	lb.	8.10	-
powd., dms., 1,000 lbs. or more, same basis	lb.	8.20	-
photo-grade, dms., 1,000 lbs. or more, same basis	lb.	8.90	-
Benzotrichloride, refd., dms. t.l., frt. equald.	lb.	.67	-
tanks, frt. equald.	lb.	.60	-
Benzoyl chloride dms., c.l., works	lb.	.57	.58
tanks, frt. equald.	lb.	.74½	.75
Benzoyl peroxide, regular gran., 10,000-lb. lots or more, bgs., works, frt. equald.	lb.	2.35	8.98
paste, 50% and 55% formulations, dms., pails, frt. equald.	lb.	1.71	1.85
Benzyl acetate, dms.	lb.	1.20	2.60
Benzyl alcohol, N.F. t.l. dms. frt. equald.	lb.	1.26	1.95
tanks, same basis	lb.	1.37	1.43
photo grade, t.l., dms., same basis	lb.	1.40	-
tanks, same basis	lb.	1.34	-
tech. grade, t.l., dms., same basis	lb.	1.32	-
tanks, same basis	lb.	1.29	-
Benzyl benzoate, dms.	lb.	1.99	2.25
Benzyl chloride, tech., non-ret. dms., c.l., t.l., frt. equald.	lb.	.69	-
tanks, f.o.b.	lb.	.64	-
Benzyl cinnamate, 25-lb. cns.	lb.	8.50	9.95
n-Benzyl-N,N-dimethylamine, t.l., dms., f.o.b. works	lb.	2.30	-
Benzyl formate, dms.	lb.	10.50	-
6-tert-Butyl-m-cresol (see Mono-tert-butyl-m-cresol).			
Benzyl isoeugenol, dms.	lb.	15.50	-
Benzyl propionate, dms.	lb.	3.35	-
Benzyl salicylate	lb.	2.80	3.25
Benzylidene acetone, cns., bots.	lb.	2.95	3.25
Bergamot oil, nat., Italian, f.o.b.	kilo	40.00	-
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid).			
Biotin, cryst., 500 gms. or more	gm.	5.50	-
Biphenyl (see Diphenyl).			
Bismuth nitrate, purif. cryst., 100-lb. dms., frt. equald.	lb.	10.00	-
Bismuth oxychloride, 100-lb. dms., works	lb.	17.20	-
Bismuth subcarbonate, USP, medium powd., 225-lb. dms., works	lb.	15.31	15.60
Bismuth subgallate, purif., 100-lb. dms., works	lb.	10.60	-
Bismuth subnitrate NF, powd., 200-lb. dms., works	lb.	14.46	-
Bismuth subsalicylate, purif. powd., 50-100 lb. dms., works	lb.	17.00	-
Bismuth trioxide, reagent, powd., 100-lb. dms., works	lb.	15.00	15.49
Bisphenol-A, epoxy grade, hopper cars, dlvd.	lb.	.67	-
polycarbonate grade, same basis	lb.	.71	-
Blanc fixe, syn., imp., bags	lb.	.20	-
Bois de rose oil, Braz., dms.	lb.	10.75	12.00
Peruvian, dms.	lb.	10.75	-
BON toner (red 48) dms., frt. alld.	lb.	7.25	8.05
(red 52) dms., same basis	lb.	6.50	7.80
Bonemeal, steamed, dom., bgs., c.l., f.o.b. Midwest plants	ton	180.00	190.00
imp., same basis, f.o.b. Philadelphia	ton	No Prices	
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).			
Bone phosphate, precip. (see Calcium phosphate tribasic).			
Borax, tech. anhyd. 99%, bgs., c.l., works	ton	547.00	-
bulk, c.l., works	ton	502.00	-
Borax, tech., gran., decahydrate, 99½% bgs., c.l., works	ton	237.00	-
bulk, c.l., works	ton	192.00	-
tech., pentahydrate, gran. 99½%, bgs., c.l., works	ton	220.00	-
bulk, c.l., works	ton	265.00	-
Borax, NF (See Sodium borate).			
Boric acid, tech., gran., 99.9%, bgs., c.l., works	ton	614.00	-
bulk, c.l., works	ton	569.00	-
Boron trichloride, CP, 1,800-lb. cyls., works	lb.	3.90	-
Boron trifluoride, 60-lb. cyls., t.l., f.o.b. works	lb.	4.03	-
bulk, same basis	lb.	3.47	-
Boron trifluoride, etherate, 500-lb. dms., t.l., f.o.b., works	lb.	2.35	-
phenolate, 500-lb. dms., t.l., same basis	lb.	1.65	-
Bromine, dms., t.l., works	lb.	.97	-
bulk, 45,000-lb. min., works	lb.	.33	.34½
purif., t.l., dlvd.	lb.	.79	-
Bromine dlvd., prices for dms. and bulk shipped W. of Rockies, 1c.-per-lb. higher. Bulk t.t. prices 1c. to 2½c.-per-lb. higher for 30,000-lb. min. and 4c. to 5½c.-per-lb. higher for 15,000-lb. min.			
Bromochloromethane, dms., c.l., f.o.b. Midland	lb.	1.12	-
Butadiene, tanks, f.o.b.	lb.	.26	.26½
1,4-Butanediol, tanks, f.o.b., frt. equald.	lb.	.90	-
dms., same basis	lb.	.99	-
Butene-1, tanks, f.o.b. works	lb.	.29	.28
n-Butyl acetate, syn., tanks, frt. alld.	lb.	.52½	-
n-Butyl acrylate, tanks, frt. alld. E.	lb.	.69	-
n-Butyl alcohol, syn., ferment, tanks, frt. ald.	lb.	.34	-
sec-Butyl alcohol, syn., tanks, dlvd.	lb.	.365	-
tert-Butyl alcohol, syn., tanks, dlvd. E.	lb.	.70	-
Butyl aldehyde (see Butyraldehyde)			
Butyl benzyl phthalate, tanks, frt. alld.	lb.	.53	-
Butyl chloride, tanks, works	lb.	.99	1.00
Butyl cyclohexyl phthalate, tanks, dlvd.	lb.	1.01	-
n-Butyl ether, dms., c.l., t.l., works	lb.	1.95	-
Butyl isodecyl phthalate, tanks, dlvd.	lb.	.35	-
n-Butyl lactate, tanks, f.o.b works	lb.	1.58	-
n-Butyllithium, 15% soln., 1,000-lb. lots or more, cyls., 100% basis, dlvd.	lb.	15.45	-
tanks, 3,000-lb. min., 100% basis, dlvd.	lb.	14.75	-
Butyl methacrylate, tanks, frt. equald.	lb.	.99	-
Butyl octyl phthalate, tanks, dlvd. E.	lb.	.45	.47
Butyl oleate, dist., dms., c.l.	lb.	.86	-
tanks	lb.	.83	-
p-tert-Butylphenol, tanks works	lb.	.70	-
Butyl phthalate (see Dibutyl phthalate).			
Butyl stearate cosmetic, dms., 77 dms. or more	lb.	.91	.97
tanks	lb.	.92	-
Butyl stearate tech., t.l.	lb.	.60	.62
tanks	lb.	.55	.58
Butylamine (see Mono-, Di- and Tributylamine).			
tert-Butylamine, dms., c.l., t.l., f.o.b. works	lb.	1.31	-
tanks, same basis	lb.	1.17	-
Butylated hydroxyanisole, food grade, dms., dlvd.	lb.	8.60	9.95
Butylated hydroxytoluene, food, feed grades, c.l., t.l., bgs., dlvd.	lb.	1.24	1.30
tech., bgs., c.l., t.l., dlvd.	lb.	1.24	1.30
1,3-Butylene glycol, tanks, dlvd.	lb.	.72	-
Butyraldehyde, tanks, dlvd.	lb.	.28½	.38
Butyric acid, tanks, frt. alld.	lb.	.44½	-
Butyric ether (see Ethyl butyrate).			
Butyrolactone, tanks, f.o.b. plant	lb.	1.20	-
n-Butyronitrile, dms., c.l., dlvd.	lb.	.93	-
tanks, dlvd.	lb.	.54	-

C

Product	Unit	Price	High
Cadmium chloride, purif., cryst., 100-lb. dms., t.l., works	lb.	3.73	-
Cadmium, CP, red, dark shade, bbls., 100-lb. lots, frt. alld., E. of Rockies	lb.	11.33	19.35
light shade, bbls., same basis	lb.	9.18	12.06
medium shade, bbls., same basis	lb.	10.69	15.20
medium-light shade, bbls., same basis	lb.	10.26	14.50
Cadmium, CP yellow, all shades, bbls., 100-lb. lots, frt. alld., E. of Rockies	lb.	8.10	7.07
Cadmium fluoborate, liq. conc., dms., t.l., works, frt. equald.	lb.	2.27	-
medium-light shade, bbls., same basis	lb.	3.22	-
Cadmium-mercury lithopone, maroon shade, bbls., frt. alld. E. of Rockies	lb.	4.60	-
Cadmium metal ingots or sticks, ton lots, cs., dlvd.	lb.	1.20	1.50
Cadmium nitrate, purif., flake 400-lb. dms., c.l., t.l., f.o.b. ship pt.	lb.	2.10	-
Cadmium-selenide lithopone, orange, light shade, bbls., 400-lb. lots, frt. ald. E. of Rockies	lb.	8.97	4.00
deep shade, bbls., same basis	lb.	4.47	4.50
Cadmium-selenide lithopone, red, dark shade, bbls., same basis	lb.	6.77	6.80
light shade, bbls., same basis	lb.	6.27	5.30
medium light shade, bbls., same basis	lb.	5.72	5.75
medium shade, bbls., same basis	lb.	6.37	6.40
maroon shade, bbls., same basis	lb.	7.47	-
Cadmium-selenide lithopone, yellow, all shades, bbls., same basis	lb.	2.97	8.00
Cadmium sulfate, 50-lb. dms., any quantity, f.o.b. ship. pt.	lb.	4.05	-
Caffeine, dom., USP, syn. cryst. anhyd., powd., 100-lb. dms., c.l., t.l., frt. ald.	lb.	4.60	-
imp., cryst., anhyd., powd., dms., 10,000 lbs. or more	lb.	4.70	4.85
Calamine, USP, dms.	lb.	1.50	1.70
Calamus oil, dms.	lb.	26.50	35.00
Calciferol. (see Ergocalciferol).			
Calcium acetate, purif., powd. dms., t.l., works	lb.	.87	-
Calcium carbide, std., generator size, bulk, c.l., f.o.b., works	ton	402.00	-
Calcium carbonate, pulverized, 325-mesh, bgs., bulk, f.o.b. works	ton	34.60	-
slurries, 54% solids, same basis	ton	187.00	-
72% solids, same basis	ton	98.00	-
quicklime, gran., ind., bulk, works	ton	67.00	-
Calcium carbonate, coated, bgs., c.l., works	lb.	.0742	.1350
Calcium carbonate, precip., bgs., cl., t.l.	ton	370.00	430.00
Calcium carbonate precip. medium, bgs., c.l., works	ton	95.00	140.00
precip. dense, bgs., c.l., surface treated, bgs., c.l., works	ton	195.00	-
ultrafine, USP, bgs., c.l., works	ton	160.00	170.00
Calcium chloride, conc., reg. grade, 77-80%, flake, bulk, c.l., works	ton	153.00	-
100-lb. bgs., c.l., same basis	ton	196.00	-
anhyd., 94-97%, flake or pellet, bulk, c.l., same basis	ton	217.00	-
80-lb. bgs., c.l., same basis	ton	279.00	-
brining grade, 80-lb. bags	ton	285.00	-
Calcium chloride, liq., 100 percent basis, t.c., t.l., barge	ton	99.76	-
45% same basis	ton	119.00	-
Calcium chloride, USP, gran., 225-lb. dms., t.l., frt. equald.	lb.	.90	-
Calcium citrate, purif., 200-lb. dms., 10,000 lbs. or more, f.o.b. works	lb.	3.92	-
Calcium cyanamide, indust., anhyd. dms., works	ton	400.00	450.00
Calcium gluconate, USP powd. t.l.	lb.	1.90	-
Calcium hydride, lump, dms., 25-1,000-lb. lots, works	lb.	10.50	19.25
Calcium hypochlorite, 100-lb. dms., truckloads ship t. E. of Rockies	100 lbs.	92.40	-
Calcium hypophosphite, dms., bulk, 500 kilos or more	kilo	13.75	14.50
Calcium iodate, FCC dms., f.o.b. works	lb.	5.50	-
Calcium iodide, 50-kilo dms., f.o.b. works	kilo	23.65	25.95
Calcium lactate, NF, powd., pentahydrate, dms., 24,000 lbs. or more, f.o.b. works	lb.	2.00	-
NF, gran., trihydrate, same basis	lb.	2.10	-
special gran., dried grade, same basis	lb.	2.80	-
Calcium naphthenate, liq., 4% Ca., c.l., f.o.b. plant, E. of Rockies	lb.	.95	-
d-Calcium pantothenate, USP, 100-500-kilo lots	kilo	10.50	11.50
dl-Calcium pantothenate, feed grade, f.o.b. frt. alld., 250 kilos or more	kilo	9.00	8.50
dl-Calcium pantothenate, calcium chloride complex, feed grade, 150 grams per lb., f.o.b., frt. alld., 500 lbs or more	lb.	2.75	-
Calcium phosphate, dibasic, feed grade, 18½% P, bulk, c.l., t.l., f.o.b. works	ton	228.00	-
Calcium phosphate, dibasic, dihydrate, USP, bgs., c.l., t.l., works, frt. equald.	100 lbs.	62.50	-
anhyd., USP, same basis	100 lbs.	71.75	-
dentifrice grade, same basis	100 lbs.	40.90	-
Calcium phosphate, monobasic, monohydrate, food grade, bgs., c.l., t.l., works, frt. equald.	100 lbs.	60.50	-
anhyd., food grade, same basis	100 lbs.	54.95	-
tribasic, NF precip., bgs., c.l., frt. equald.	100 lbs.	62.50	-
Calcium propionate, dms., 2,000 lbs. or more f.o.b. frt. ald.	lb.	.50	.55
Calcium silicate, hydrated, bgs., c.l., works	lb.	.07	-
Calcium silicate, paint grade (see Wollastonite).			
Calomel, NF, mild powd., 100-lb. dms., f.o.b. works	lb.	8.50	-
Camphene chlorinated, 67-69% (see Toxaphene).			
Camphor, monobromated, dms., kgs.	lb.	8.63	9.70
Camphor, syn., tech., 155-lb. dms., 5,000 lbs. or more	lb.	1.80	-
USP, powd., 165-lb. dms., 5,000 lb. lots or more	lb.	2.36	-
syn., refd., 1-oz. tablets, ctns. 1,000-lb. lots or more	lb.	3.50	-
Camphor oil, yellow, 25-lb. dms	lb.	2.50	-
white, dms.	lb.	1.50	-
spec. grav., 1.070, dms.	lb.	2.00	2.25
Cananga oil, Indonesian, dms.	kilo	17.00	-
Candelilla wax, crude, bgs.	lb.	1.90	-
refd., pure, bgs.	lb.	2.10	-
Capric acid, coml. pure, dms.	lb.	.80	.85
tanks	lb.	.80	.85
Capric aldehyde (aldehyde C-10) dms., one	lb.	3.95	5.36
Caprolactam monomer, flake, bgs., t.l., f.o.b. shipping point	lb.	.87	-
molten, tanks, same basis	lb.	.85	-
Capryl alcohol sec. 92-98% tanks, f.o.b. works	lb.	.86	-
Caprylic acid, coml. pure tanks	lb.	.79½	-
Capsicum (see Pepper, red).			
Capsicum oil (see Capsicum oleoresin).			
Capsicum oleoresin, NF, from dom. pepper, dms.	lb.	11.00	-
NF, from African pepper, dms. 500,000 pungency	lb.	9.00	-
1,000,000 pungency	lb.	17.00	18.00
Caraway oil, Poland, dms.	lb.	22.00	25.00
Caraway seed, Dutch, bgs.	lb.	.60	.61
Egyptian, bgs.	lb.	.53	-
Carbon black, furnace, fast extruding (FEF), bulk, c.l., works	lb.	.3175	-
bgs., c.l., works	lb.	.3375	-
general purpose (GPF), bulk, c.l., works	lb.	.3125	-
bgs., c.l. works	lb.	.3325	-
high abrasion (HAF), high structure, bulk, c.l. works	lb.	.3300	-
bgs., c.l., works	lb.	.36	-

CHEMICAL PRICES

WEEK ENDING AUGUST 8, 1986

Product	Unit	Price	High
Carbon Black, low structure, bulk, c.l. works	lb.	.3225	-
bags, c.l. works	lb.	.3425	-
Intermediate-super-abrasion (ISAF)	lb.	.3450	-
bgs., c.l. works	lb.	.3650	-
super-abrasion (SAF), bulk, c.l., works	lb.	.3850	-
bgs., c.l., works	lb.	.4050	-
semi-reinforcing (SRF), bulk, c.l., works	lb.	.3125	-
bgs., c.l., works	lb.	.3325	-
Carbon black, thermal, medium, bgs. c.l., works	lb.	.30	.30½
bulk, c.l. works	lb.	.32	.34½
Carbon black oil, barge, f.o.b. Gulf refineries	bbls.	14.50	-
f.o.b. W. coast refineries	bbls.	14.50	-
Carbon disulfide, t.c., f.o.b. works	ton	420.00	-
Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld.	lb.	.38	-
tech., dms., c.l., t.l., frt. alld.	lb.	.31	-
tank transport (min. 4,000 gals.) frt. alld.	lb.	.24	-
Carboxymethyl cellulose (see CMC).			
Cardamom oil, NF, bots.	lb.	75.00	100.00
Cardamoms, decort, Guatemalan.	lb.	3.25	-
green, Guatemalan, bgs.	lb.	9.25	9.75
Carmine, No. 40, NF, bulk, 100-lb. lots or more, dlvd.	lb.	135.00	140.00
Carnauba wax, Pernahyba, No. 1, yellow, bgs., ton lots	lb.	1.95	2.05
Ceara, No. 1, yellow, bgs., ton lots	lb.	1.75	1.90
North Country, No. 2, refined, bgs., ton lots	lb.	1.55	1.95
Carnauba wax, North Country No. 3, centrifuged, bgs., ton lots	lb	1.10	-
North Country, No. 3, refined, bgs., ton lots	lb.	1.30	1.45
Powdered carnauba wax, 20 to 100 mesh, 20c. per lb. higher.			
b-Carotene, in vegetable oil, semi-solid suspension, 400,000 A units per gram., 33 lbs. or more	lb.	32.75	-
b-Carotene, liq. in vegetable oil, 500,000 A units per gram., 33 lbs. or more	lb.	40.75	-
b-Carotene, dry, beads, 10%, 187,000 A units per gram 50-lb. cns	lb.	29.85	-
d-Carvone, 25-lb. dms., syn.	lb.	48.00	-
l-Carvone	lb.	7.00	7.25
Cascara sagrada bark, bulk	lb.	1.00	-
Casein, imp., acid-precip., grd., 30-mesh, Australian, edible, same basis, c.l.f.	lb.	1.45	-
Australian, indust., same basis, c.l.f.	lb.	1.365	-
Cassella acid, 303 mol. wt., dms., frt. alld., 100% basis	lb.	3.70	-
Cassia, Korintji "A" bgs.	lb.	.90	.94
"B" bgs.	lb.	.72	.78
Castor oil, raw, No. 1, Braz. tanks.	lb.	.32½	.33
USP 5-9 dms.	lb.	.74	-
refd. deod., 5-9 dms.	lb.	.78	-
blown, 5-9 dms.	lb.	.75	-
dehydrated, bodied, tanks	lb.	.74	-
dehydrated, unbodied, tanks	lb.	.65	-
Castor oil, acids dehydrated, dms.	lb.	1.10	-
ricinoleic acid	lb.	.79½	.83
Castor pomace, bgs., container load, f.o.b., Miami, Fla.	ton	154.00	-
Castoreum, nat., cns.	lb.	18.00	35.00
syn., cns.	lb.	11.00	-
Catechol, CP, 45-kilo dms., 50-239 dms., f.o.b.	kilo.	7.93	-
tech., bgs., t.l., same basis	kilo.	3.71	-
Caustic potash (see Potash, caustic).			
Caustic soda (see Soda, caustic).			
Cedarleaf oil, dms.	lb.	17.50	-
Cedarwood oil, Texas, dms., cns.	lb.	3.50	4.00
Virginia	lb.	3.70	4.20
Cedrol, prime dms.	lb.	6.25	-
Cedryl acetate, dist., dms.	lb.	4.25	5.50
Celery seed, Indian, bgs.	lb.	.48	.49
Celery seed oil	lb.	60.00	53.00
Cellulose acetate, powd., bgs., t.l., dlvd. E.	lb.	1.30	-
Cellulose acetate butyrate, powd., 17% butyl content, bgs., t.l., dlvd. E.	lb.	1.76	-
38% butyl content, bgs., dlvd. E.	lb.	1.59	-
50% butyl content, bgs., dlvd. E.	lb.	1.81	-
55% butyl content, bgs., dlvd. E.	lb.	1.83	-
Cellulose gum, pure, high vis., bgs., 24,000-lb. lots or more works, f.o.b. Hopewell, Va.	lb.	1.60	1.70
std., low or medium vis., bgs., t.l., f.o.b. Hopewell, Va.	lb.	1.80	1.90
Cerium concentrate CeO_2, 50 lbs.	lb.	1.35	-
Cerium hydroxide 90% CeO_2, dms., works	lb.	5.40	-
77% CeO_2, dms., works	lb.	4.20	1.60
Cerium oxide, optical grade, bgs., 50-lb. lots or more, dlvd.	lb.	1.65	1.90
Cetyl alcohol, NF, cns., c.l., t.l., dlvd. E.	lb.	.68½	1.27
Chalk (see Calcium carbonate).			
Chamomile flowers, Hungarian, cs.	lb.	4.25	4.50
Roman, cs.	lb.	4.94	-
Egyptian, whole	lb.	2.70	3.00
Chamomile oil, blue, Egyptian	lb.	545.00	-
blue, Hungarian	lb.	370.90	-
Chenopodium oil, NF, cns.	lb.	15.00	-
Chicago acid, dry, bbls., frt. ald.	lb.	13.50	-
Chilies (see Pepper, red).			
Chlorendic anhydride, tech., dms., t.l., works	lb.	1.30	-
Chlorinated paraffin, 40% chlorine, bulk, dlvd., Zone 1	lb.	.46	.46½
50% chlorine, same basis	lb.	.46	.47½
60% chlorine, same basis	lb.	.46½	.48½
70% chlorine, resinous, 50-lb. bgs., c.l., dlvd., Zone 1	lb.	.89	-

ABBREVIATIONS

THE TERMINOLOGY OF THE CHEMICAL MARKETPLACE

a/alpha
ald./allowed
amorph./amorphous
AMP/American melting point
anhyd./anhydrous
AOAC/Association of Official Agricultural Chemists
a.p.a./available phosphoric acid
approx./approximately
ASTM/American Society for Testing & Materials

b/beta
Be/Baume
bbls./barrels
b.g./beta-gamma
bgs./bags
bls./bales
bots./bottles
b.p./boiling point
b.p.l./bone phosphate of lime
b.r./boiling range
bxs./boxes

C./Centigrade
cbys./carboys
c.c./cubic centimeters
CD/completely denatured
c.i.f./cost insurance freight
c.l./carload
cnc./concentrated
coml./commercial
cp/chemically pure
cps./centipoises
cryst./crystalline
cs./cases
ctns./cartons
cyls./cylinders

d/dextro
dbl./double
denat./denatured
dist./distilled
dlvd./delivered
dms./drums
dom./domestic

E/East
e.p./end point
equald./equalized
exp./expressed
extr./extracted

F./Fahrenheit
f.o.b./free on board
f.p./freezing point
frt./freight

g/gamma
gal./gallon
g.p./general purpose
gran./granular
grd./ground

i.b.p./initial boiling point
imp./imported
incl./included
indust./industrial
kgs./kegs

l/laevo
lb./pound
l.c.l./less carload
l.t.l./less truckload
liq./liquid

m/meta
m.a.p./mixed aniline point
mcg./microgram
mfrs./manufacturers
min./minimum
m.p./melting point

N/nitrogen
n/normal
nat./natural
neut./neutral
NF/National Formulary
No./number
Nom./nominal

o/ortho
ord./ordinary
oz./ounce
P/phosphorus
p/para
Pac./Pacific
phos./phosphate
photo/photographic
pkgs./packages
powd./powdered
precip./precipitated
prod./producer
pt./point
pulv./pulverized
purif./purified

refd./refined
resub./resublimed
ret./returnable
SD/specially denatured
SE/Southeast
sec./secondary

sp.g./specific gravity
soln./solution
tanks/railroad tank cars
tech./technical
tert./tertiary
t.l./truckload
ton/2,000 pounds
USP/United States Pharmacopeia
vis./viscosity
W./West
whse./warehouse

NOTE: A unit-ton is 1 percent of 2,000 pounds of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the unit-ton price, shown in Chemical Marketing Reporter gives the price of 2,000 pounds of the material.

CHEMICAL PRICES

WEEK ENDING AUGUST 8, 1986

Chlorinated paraffin, Zone 2 prices are 1c. per lb. higher and Zone 3 prices are 2c per lb. higher and t.l. drum prices are 5c per lb. higher

Chlorinated rubber, 5, 10, 20 cps., bgs, t.l., divd. .... lb.	1.66	-
40 cps, bgs., t.l., divd. .... lb.	1.82	-
125 cps., bgs., t.l., divd. .... lb.	2.90	-
300 cps., bgs., t.l., divd. .... lb.	2.78	-
Chlorine, tanks single units works, f.o.b., frt. equald. .... ton	195.00	200.00
Chloroacetic acid, mono, high purity, flake, 99% bulk f.o.b. works .... lb.	.56	-
2-Chloro-4-aminotoluene, tech., liq., dms., c.l., t.l., f.o.b. works . lb.	1.88	-
o-Chloroaniline, liquid, dms., c.l., f.o.b. works .... lb.	1.63	-
tanks, same basis .... lb.	1.55	-
p-Chloroaniline, solid, c.l., t.l., f.o.b. lb.	1.70	-
flake, dms., c.l., same basis .... lb.	2.00	-
o-Chlorobenzaldehyde, dms., t.l., works .... lb.	2.45	-
p-Chlorobenzaldehyde, dms., 2,000 lbs. or more, works .... lb.	3.84	3.85
o-Chlorobenzoic acid, dms. t.l. wks. . lb.	3.90	-
p-Chlorobenzoic acid, dms., 500-lb. lots or more, works .... lb.	1.69	2.25
Chloroform, tech. tanks, dstr. divd. .. lb.	.34½	-
tech., consumers, tanks, divd. .. lb.	.34½	-
NF tanks, min., consumer, 4,000 gals. divd. .... lb.	.35½	-
2-Chloro-4-nitroaniline, paste, commodity basis, dms., t.l., f.o.b. .... lb.	8.06	-
powd., same basis .... lb.	3.15	-
4-Chloro-2-nitroaniline, paste, 172.5 mol. wt., commodity basis, dms., t.l., f.o.b. .... lb.	2.25	-
powd., same basis .... lb.	2.70	-
o-Chlorophenol, dms., c.l., frt. equald .... lb.	2.00	2.40
p-Chlorophenol, dms., c.l., frt. equald .... lb.	1.25	1.70
Chloropicrin, coml., 1,500-lb. cyls., t.l., f.o.b. works .... lb.	1.25	-
Chlorosulfonic acid, tanks, frt. equald .... lb.	.18½	-
p-Chlorotoluene, tech., tanks, works .... lb.	1.00	-
Cholecalciferol, dry, 40,000,000 units per gram, kilo lots .... gm.	24.00	-
Choline bitartrate, crysl., 98% min., 50 kilo dms., f.o.b. Springfield, Mo. .... kilo	6.80	-
Choline chloride, feed grade, 70% aqueous, f.c., t.l., divd. E of Rockies .... lb.	.28	-
80% dry supplement .... lb.	.39	-
Choline chloride, 80% dry supplement, bulk hopper cars .... lb.	.38	-
bgs., 50,000 lbs. min. .... lb.	.40	-
Choline chloride, pharmaceutical, 50 kilo, lots, f.o.b. Springfield, Mo. .... kilo	5.00	-
Choline dihydrogen citrate, 98% min., 50 kilo lots, f.o.b. Springfield, Mo. .... kilo	6.00	-
Chrome green, CP extra light, bgs., divd. E. of Rockies .... lb.	1.66	-
light, bgs., same basis .... lb.	1.70	-
medium, bgs., same basis .... lb.	1.72	-
extra deep, CP., same basis .... lb.	1.74	-
Chrome orange, CP, bgs., divd. E. of Rockies .... lb.	.83	.89
Chrome yellow CP bbls., divd. E. of Rockies .... lb.	1.09	1.16
Chromic acid, 99¾%, flake dms., c.l., frt. equald .... lb.	1.18	-
grd., same basis .... lb.	1.25	-
Chromium acetate, soln., 7½%, dms., 500-2,000-lb. lots, works .. lb.	.10	-
Chromium fluoride, dms., t.l., works .... lb.	.81	-
Chromium nitrate, dms., t.l., f.o.b. .. lb.	1.45	-
10% metal soln., 500-lb. dms. same basis .... lb.	.74	.86
Chromium oxide, hydrated, 50-lb. bgs., c.l. .... lb.	5.50	-
pure, bgs., c.l. .... lb.	1.90	2.00
Cinnamic aldehyde, cns., dms. .... lb.	1.85	2.45
Cinnamic alcohol, 25-lb. cns. .... lb.	4.50	-
Cinnamon, H2 .... lb.	1.05	1.10
Cinnamon bark oil, bots. .... lb.	86.00	95.00
Cinnamon leaf oil, dms. .... lb.	2.80	-
Citral, nat., dms. .... lb.	5.50	6.65
syn., 55-gal. dms. f.o.b. .... lb.	3.16	-
Citric acid, USP, hydrous, gran., 250-lb. dms., t.l. .... lb.	1.18	-
Citric acid, USP, anhyd., gran. 250-lb. dms., t.l., del. .... lb.	.86	-
Citric acid anhyde, powder bo. higher		
Citronella oil, Ceylon, dms. .... lb.	2.12	2.24
Java, dms. .... kilo	4.50	-
China, dms. .... kilo	4.30	-
Citronellal, 25-lb cans .... lb.	3.58	7.40
Citronellol drums, f.o.b. .... lb.	3.66	-
Citronellyl acetate, dms. .... lb.	5.50	8.50
Citronellyl formate, 25-lb. cns. .... lb.	8.85	-
Civet, artif., bots. .... lb.	20.00	-
nat. .... kilo	500.00	-
Clay ball, dom. air floated, bgs., c.l., Tenn. .... ton	46.00	-
dom., crushed, moisture-repellent, bulk, c.l., Tenn. .... ton	24.00	-
Clay China (see Kaolin).		
Cleaners, naphtha, 140° flash tanks., New Jersey or New York, divd. .... gal.	1.40	-
Clove leaf oil Indonesian, reg. dms. kilo	2.85	3.25
Madagascar, reg. .... lb.	4.20	-
Clove bud oil .... kilo	24.00	-
Cloves, Brazil .... lb.	2.35	2.40
Zanzibar .... lb.	4.20	-
Madagascar .... lb.	2.35	2.40
CMC, technical, 98% minimum, low or medium vis., bgs., 24,000 lbs., f.o.b. Hopewell, Va., 100% basis .... lb.	1.25	-
detergent makers, f.o.b. manufacturing point .... lb.	.64	-
CMC, purif., high vis., (see Cellulose gum).		
Coaltar pitch, indust., liq., works . ton.	250.00	266.00
roofing, 140-155, Federal specification RP-381 Type 1, bulk works .... ton	350.00	-
Cobalt acetate, dms., t.l., frt. ald. .. lb.	3.61	4.25
Cobalt carbonate, powd., dms., frt. ald. .... lb.	6.61	6.18
Cobalt chloride, dms., 5,000 lbs. or more, ft. equald .... lb.	4.15	-
Cobalt hydrate, dms., t.l., frt. ald. .. lb.	8.20	10.65
Cobalt metal, 99.5-99.9%, 250-kilo dms., f.o.b. NY, Chicago. .. lb.	11.70	-
Cobalt naphthenate, liq., 6% Co., dms., divd. .... lb.	2.06	-
Cobalt nitrate, dms., t.l. frt. ald. .. lb.	2.74	3.45
Cobalt oxide, imp., black, 72-73% Co. .... lb.	9.51	-
Cobalt oxide, imp., 70-71% Co. .... lb.	9.78	-
Cobalt phosphate powd. 32.1% Co., dms., divd. .... lb.	1.35	-
Cobalt resinate fused, 3% Co., dms. .... lb.	.38½	-
Cobalt sulfate, crysl., bgs., 10,000 lbs. or more, frt. ald. E. .... lb.	2.81	3.54
monohydrate, dms., frt. ald. .... lb.	4.58	6.02
Cobalt tallate, 6% Co., dms., divd. . lb.	2.18	-
Cocillana bark, bls. .... lb.	.40	.45
Cocoa butter, spot .... lb.	2.05	2.10
Coconut oil (See Oils, Fats & Waxes market report.).		
Coconut oil acids, distilled, t.c., f.o.b. .... lb.	.52	.56
double distilled, same basis .... lb.	.54	.63
Cod oil, f.o.b., Gloucester, Mass., bulk .... gal.	6.50	-
Codeine alkaloid, NF, 25-kilo lots, kilo	800.00	-
Codeine phosphate, USP, cns., 25-kilo lots .... kilo	640.00	-
Codeine sulfate, NF cns., 25-kilo lots .... kilo	775.00	-
Codliver oil, NF, dms. .... gal.	6.50	7.25
Copaiba balsam, dms. .... lb.	1.50	-
Copaiba oil, cns., dms. .... lb.	3.75	-
Copper acetate, monohydrate, cryst., tech., dms., t.l., works .... lb.	.71	.74
Copper bromide, (cupric) 200-lb. dms., 100,000-lbs. -per-year contracts, works .... lb.	1.34	-
Copper carbonate, 55% Cu, dark, dense, 50-lb. bgs., c.l., t.l., works .... 100 lbs.	108.30	-
light, fluffy, 50 lb. bags, c.l., t.l., works .... 100 lbs.	109.30	-
Copper chloride (cupric), anhyd., c.l., works .... lb.	.90	-
Copper cyanide, tech. dms., 24,000-lb. lots or more .... lb.	2.30	2.62
Copper fluoborate, (cupric), liq. conc., dms., f.l., works, frt. equald .... lb.	.82	-
Copper gluconate, FCC grade, 25-lb. dm., frt. equald .... lb.	6.50	-
Copper metal electrolytic wire bars, divd., domestic, basis .... lb.	.62½	-
Copper naphthenate, liq., 8% Cu., dms., frt. ald. .... lb.	1.18	-
Copper nitrate (cupric), purif., flake, dms., t.l., works .... lb.	.43¼	-
Copper oleate, solid, 6% Cu. dms., works frt ald. .... lb.	.87	-
Copper oxide, black (cupric), dms., 90,000-lb. lots, works .... lb.	1.21	-
red (cuprous), dms., 87%, USN Type 1, (AA), 60,000-lb. lots, works .... lb.	1.18	1.20
red, 90%, Type 2, same basis .... lb.	1.15	-
Copper-8-quinolinolate, 10%, liq. emulsion, t.l., divd. .... lb.	2.52	-
Copper sulfate, crysl., pentahydrate, 86% bgs., c.l., f.o.b. works .... 100 lbs.	46.45	-
CP, pentahydrate, cryst., dms., l.c.l., works .... 100 lbs.	60.00	-
monohydrated, 35% Cu, dms., c.l., works .... 100 lbs.	75.10	-
basic, bgs., c.l., works .... 100 lbs.	88.30	-
Coriander oil, USP, dms. .... lb.	22.00	28.00
Coriander seed Moroccan .... lb.	.35	.37
Rumanian .... lb.	.35	-
Corn oil (See Oils, Fats & Waxes market report).		
Corn oil, crude, foots (soapstock), 95% acid; New York .... lb.	.13½	.14
Corn oil acid, dms. .... lb.	.50	-
tanks .... lb.	.32	.40
Corn syrup 43 Be., tanks, f.o.b. works .... 100 lbs.	11.22	11.43
Cortisone acetate, USP, dms., 5 kilos or more .... gram.	.80	-
Cottonseed meal (See Oils, Fats & Waxes market report.)		
Cottonseed oil (See Oils, Fats & Waxes market report.)		
Cottonseed oil, acidulated (soap stock), acid, 95%, tanks, N.Y. .... lb.	.15	-
Cottonseed oil acids, dist., dms. .... lb.	.63	-
tanks .... lb.	.55	-
Coumarin, NF X, cryst., over 600-lb. lots .... lb.	8.00	8.20
Cream of tartar (see Potassium bitartrate).		
Creosote, coaltar, grade 1, tanks, f.o.b. works .... gal.	1.15	1.16
soln., 80/20, tanks, same basis . gal.	1.134	1.17
p-Cresidine, fused, dms., works ... lb.	4.81	-
m-Cresol, 95-98%, dms., t.l., f.o.b. lb.	1.71	-
tanks, same basis .... lb.	1.06	-
m,p-Cresol, 99%, dms., t.l., f.o.b. lb.	.94	-
bulk, same basis .... lb.	.82	-
o-Cresol, 99% pure, dms., t.l., f.o.b. lb.	.87	-
bulk, same basis .... lb.	.75	-
98% pure, dms., t.l., f.o.b. .... lb.	.87	-
bulk, same basis .... lb.	.75	-
p-Cresol, 86%, dms., t.l., f.o.b. .... lb.	1.22	-
bulk, same basis .... lb.	1.15	-
Cresylic acid, coaltar, dom., metapara content above 25%, resin and tricresyl phosphate grades, tanks, frt. ald. .... lb.	.58	-
Cresylic acid, dom., metapara content 25% or less, tanks, frt. ald. lb.	.53	-
Crotonic acid; 200-lb. dms., t.l., f.o.b. divd. .... lb.	1.60	-
Cryolite syn., bulk, c.l., works .... ton	510.00	550.00
Cube root, powd., 5% rotenone, basis. 50-lb. bgs., t.l., works .... lb.	.60	-
Cumene, bulk, contract, f.o.b. .... lb.	.13¼	.13½
Cumin seed, Indian, bgs. .... lb.	.82	.85
Cyanuric acid, dms., c.l., t.l. frt. equald .... lb.	1.16	1.37
Cyclamen aldehyde, 50% min aldehyde content, dms .... lb.	4.85	-
85.5%, dms. .... lb.	7.35	9.20
90-92%, dms. .... lb.	7.65	-
Cyclohexane, bulk, barges, wks. gal	.844	.851
Cyclohexanol tech., tanks, f.o.b. .... lb.	.52	.66½
Cyclohexanone tech., tanks, f.o.b. works .... lb.	.55½	.59½
tanks, divd. .... lb.	.505	-
Cyclohexylamine, tech., tanks, works .... lb.	.85	-

D

2,4-D acid, tech., 50-lb. bgs., c.l., t.l., works, frt. equald. .... lb.	1.10	1.25
2,4-D butyl ester, tech., 55-gal. dms., c.l., t.l., works, frt. equald. . lb.	1.30	-
tanks, same basis .... lb.	1.25	-
2,4-D dimethylamine salt, l.c., t.l. works, frt. ald. .... gal.	6.05	-
Decyl alcohol, mixed isomers, tanks, divd. .... lb.	.32	-
perfume grade, dms. .... lb.	.75	-
Defluorinated phosphate (tricalcium), feed grade, 18% P, c.l., bulk, f.o.b. works .... ton	185.00	226.00
Denatured alcohol, ethyl, CD18, CD18, tanks, divd. E. .... gal.	1.87	-

NOTE: Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.

Denatured alcohol, ethyl.		
SD2B, tanks, divd. E. .... gal.	1.61	-
SD3A, tanks, divd. E. .... gal.	1.76½	-
SD23A, tanks, divd. E. .... gal.	1.66	-
SD23H, tanks, divd. E. .... gal.	1.69	-
SD29, tanks, divd. E. .... gal.	1.63	-
SD30, tanks, divd. E. .... gal.	1.72½	-
SD35A, tanks, divd. E. .... gal.	1.66½	-
Denatured alcohol, ethyl, brucine formula 3D40, tanks, divd. E. .... gal.	1.83	-
ethyl, optional formula, SD40, tanks, divd. E. .... gal.	1.82½	-

For anhyd. alcohol on above formulas, prices are 12c. per gal. higher.

West Coast divd. prices are the same as Eastern prices, except in Idaho, Oregon and Washington where a 5c. differential on tankcars is maintained.

Desoxyephedrine hydrochloride (See Methamphetamine hydrochloride)		
Detergent alkylate, straight chain dodecylbenzene, tanks, barges, f.o.b. .... lb.	.45	-
Dextrin, corn, canary dark, paper bgs., c.l., works .... 100 lbs.	26.04	-
white, paper bgs., c.l., works .... 100 lbs.	27.43	-
Dextrose, anhyd., coml., bgs., c.l., divd. New York .... 100 lbs.	41.10	-
USP special, 100-lb. bgs., c.l., divd. New York .... 100 lbs.	46.50	-
Dextrose, hydrated coml, bgs., c.l., divd. New York .... 100 lbs.	24.26	-
Western zone .... 100 lbs.	25.60	-
Diacetone alcohol, acetone free, tanks, divd. .... lb.	.62	-
Diacetyl, flavor grade, dms. .... lb.	8.25	15.00
Diammonium phosphate, fert. grade, min. 18% N, 46% P, bulk, c.l., f.o.b. Fla. works .... ton	140.00	145.00
Diammonium phosphate, food grade, 18% N, 20% P, bulk, c.l., f.o.b. Fla. works .... ton	240.00	-
bgs., same basis .... ton	250.00	-
Diammonium phosphate, tech., bgs., c.l., t.l., works, frt. equald .... 100 lbs.	52.60	-
food grade, bgs., c.l., t.l., same basis .... 100 lbs.	57.76	-
2,4-Di-tert-amylphenol, min. 86.5%, dms., c.l., t.l., works .... lb.	1.04	-
tanks, works .... lb.	.87	-
Diarylide yellow, OT, (yellow 14), dms., frt. ald. .... lb.	8.20	-
o-Dianisidine dihydrochloride, 100%, MW 244, dms., t.l., dvd. .... lb.	4.25	-
2,6-Di-tert-Butyl-p-Cresol (see Butylated hydroxytoluene)		
Dibutyl fumarate, tanks, f.o.b. works .... lb.	.70	.75
Dibutyl maleate tanks, f.o.b. works .. lb.	.81	-
Dibutyl phthalate, tanks, works .... lb.	.68	-
Dibutyl sebacate tanks, works .... lb.	1.58	1.65
Dibutylamine, dms., c.l., divd. .... lb.	1.12	-
tanks, same basis .... lb.	1.06	-
Dicapryl phthalate tanks, frt. ald. E. lb.	.35	.37
2-5-Dichloroaniline, flake, dms., works .... lb.	2.00	-
fused, dms., works .... lb.	1.60	-
3,4-Dichloroaniline, tech. 98%, solid, dms., c.l., t.l., f.o.b. works . lb.	1.48	1.57
o-Dichlorobenzene, tech., 80%, dms., c.l., t.l., divd. .... lb.	.52	-
tanks, same basis .... lb.	.45	-
88% reld., dms., c.l., same basis . lb.	.54	-
tanks, same basis .... lb.	.47	-
p-Dichlorobenzene, graded, 300-lb. dms., t.l., f.o.b., frt. equald. lb.	.81	.62
tanks, liq., same basis .... lb.	.43	.47
2,6-Dichloro-4-nitroaniline, dms., 10,000 lbs. or more, works .. lb.	8.30	-
Dichlorophenoxyacetic acid (see 2,4-D).		
Dicyclohexylamine, dms., c.l., t.l., f.o.b. .... lb.	1.35	-
tanks, same basis .... lb.	1.25	-
Dicyclohexyl phthalate, bgs., c.l., t.l., divd. .... lb.	1.25	-
Dicyclopentadiene, high-purity, 87-88%, tanks, works .... lb.	.38	-
Diethanolamine, tanks, frt. ald. .... lb.	.44	.47
Diethanolamine lauryl sulfate, tanks, frt. ald. .... lb.	.41	-
DDVP (see Dimethyl dichlorovinyl phosphate).		
Diethyl sulfate and (see Darbital)		
Diethyl carbonate, tankwagons, f.o.b. works .... lb.	1.40	-
Diethyl ethanolamine, CP dms., c.l., divd. .... lb.	1.18	-
tanks, divd. .... lb.	1.10	-
Diethyltetrabromine tech. 8c per lb lower.		
Diethyl oxalate, dms., c.l., f.o.b. works .... lb.	1.80	-
Diethyl phthalate tanks f.o.b. .... lb.	.82	.85
solutions, cosmetic grades, t.l., works		
Diethyl sulfate tanks, frt. ald. E. .... lb.	.97½	-
Diethyl thiourea, dms., c.l., t.l., works .... lb.	.59	-
Di-2-ethylhexyl adipate (see Dioctyl adipate).	2.48	
Diallyl [illegible] 95.97% min. meta [illegible] dms., t.l., f.o.b. works .... lb.	2.75	-
N,N-Diethyl-m-toluidine, tech., liq., dms., c.l., f.o.b. .... lb.	3.18	-
tanks, same basis .... lb.	3.10	-
Diethylamine, dms., c.l., divd. .... lb.	1.16	-
tanks, same basis .... lb.	1.02	-
N,N-Diethylaniline, dms., c.l., t.l., f.o.b. works .... lb.	1.83	-
tanks same basis .... lb.	1.75	-
Diethylbenzene, tanks, f.o.b. works lb.	.98	-
Di-2-ethylhexyl azelate (see Dioctyl azelate).		
Di-2-ethylhexyl phthalate (see Dioctyl phthalate).		
Diethylene glycol, tanks, divd. E. .... lb.	.29½	.31½
Diethylene glycol monobutyl ether, dms., c.l., frt. ald. E. .... lb.	.65	-
tanks, frt. ald. E. .... lb.	.57	-
Diethylene glycol monoethyl ether, dms., c.l., frt. ald. E. .... lb.	.64	-
tanks, frt. ald. E .... lb.	.56	-
Diethylene glycol monomethyl ether, dms., c.l., frt. ald. .... lb.	.62	-
tanks, frt. ald. .... lb.	.54	-
Diethylene glycol monobutyl ether acetate, dms., c.l., divd. E. .. lb.	.80	-
tanks, divd. E. .... lb.	.72	-
Diethylene glycol monoethyl ether acetate, dms., c.l., frt. ald. E. lb.	.80	-
tanks, frt. ald. .... lb.	.72	-
Diethylenetriamine, tanks, f.o.b. works .... lb.	1.60	1.80
Diethylenetriamine pentaacetic acid, pentasodium salt solution, tank cars/tank trucks, frt. equalized .... lb.	.45	-
Digitoxin, USP, imp., bots .... gram	2.60	3.00
Diglycol laurate, dms., ton lots .... lb.	.32½	-
Diglycol stearate, dms., t.l. .... lb.	.62	.71
Dihydrazine sulfate, dms., works .... lb.	1.10	1.25
Dihydrostreptomycin sulfate, bulk kilo.	48.00	-
Dihydrocyanolone, 50-kilo lots, works .... kilo	40.00	-
Di-isobutyl ketone, tanks, divd. .... lb.	.63	-
Di-isobutyl phthalate tanks, divd. E. lb.	.55	.57
Di-isobutylene, tanks, f.o.b. Houston .... lb.	.37	-
Di-isodecyl phthalate, tanks, divd. .... lb.	.39½	-
Di-isononyl phthalate, tanks, divd. .... lb.	.41	-
Di-iso-octyl azelate, tanks, divd. E. .... lb.	.90	-
Di-iso-octyl phthalate, tanks, divd. .... lb.	.41	-
Di-isopropanolamine, dms., c.l., frt. ald. .... lb.	.66½	-
tanks, same basis .... lb.	.58½	-
Di-isopropylamine, dms., c.l., divd. .. lb.	1.17	-
tanks, same basis .... lb.	1.07	-
Dilauryl 3,3-thiodipropionate, dms., t.l., frt. ald. .... lb.	1.89	-
Dill oil, USP, dms. .... lb.	7.00	8.25
Dimethyl anthranilate, dms. .... lb.	15.80	-
Dimethyl benzyl carbinyl acetate, 25-lb. dms. .... lb.	6.95	-
Dimethyl carbonate, dms., t.l., f.o.b. works .... lb.	.90	-
Dimethyl dichlorovinyl phosphate, 55-gal. dms., f.o.b. .... lb.	1.80	1.90
Dimethyl ethanolamine, anhyd., dms., c.l., divd. E. .... lb.	1.16	1.18
tanks, divd. E. .... lb.	1.07	1.10
Dimethyl ether, aerosol grade, tanks, divd. .... lb.	.38	-
Dimethyl phthalate, tanks, f.o.b. works .... lb.	.85	-
Dimethyl sebacate, tanks, f.o.b. works .... lb.	2.28	2.38
Dimethyl sulfate, ref. dms., c.l., f.o.b. works .... lb.	.57	-
tanks .... lb.	.48	-
Dimethyl sulfide, tanks, works .... lb.	1.09	-
Dimethyl sulfoxide, tanks, works .... lb.	.78	-
Dimethylacetamide, bulk f.o.b. works .... lb.	.87½	-
Dimethylamine, 25% soln., tanks, frt. equald., 100% basis .... lb.	.63½	-
40% soln., tanks, frt. equald., 100% basis .... lb.	.63½	-
anhyd., tanks, frt. equald. .... lb.	.64½	-
N,N-Dimethylaniline, t.l., f.o.b. .... lb.	1.03	-
t.l. dms. .... lb.	1.11	-
N,N-Dimethylformamide, dms., c.l., t.l., f.o.b., works .... lb.	.57	-
tanks, same basis .... lb.	.49	-
2,4-Dinitroaniline, tons lots, f.o.b. .... lb.	1.22	-
Dinitroaniline, orange toner, CP, bgs., divd. E. of Rockies .... lb.	5.20	-
2,4-Dinitrochlorobenzene, crystallizing at 47°, t.l., f.o.b. Charlotte, N.C. .... lb.	.95	-
2,4-Dinitrophenol, 250-lb. dms., f.o.b. Charlotte, N.C. .... lb.	1.95	-
Dinitrotoluene, mix., tech. f.o.b. works .... lb.	.50	-
2,4-Dinitrotoluene, dms., c.l., t.l., works .... lb.	1.28	-
tanks, works .... lb.	1.20	-
Dioctyl adipate, tanks, frt. ald. E. .... lb.	.67	-
Dioctyl azelate, tanks, divd. E. .... lb.	.90	-
Dioctyl phthalate, tanks, divd. .... lb.	.40	-
Dioctyl sebacate, 99%, tanks, f.o.b. works .... lb.	1.29	-
1,4-Dioxane, tanks, frt. ald. E. .... lb.	1.19	-
t.l., same basis .... lb.	1.31	-
Dipentaerythritol, bgs., c.l., t.l., divd. E. .... lb.	1.42	-
Dipentene steam-dist., tanks, f.o.b. Fla. works .... lb.	.25	-
sulfate turpentine derived, tanks .. lb.	.25	-
Dip oil (see Tar acid oil).		
Diphenhydramine hydrochloride, USP, dom., 1,000-kilo lots, dms. divd. .... kilo	20.00	24.00
Diphenyl, 99.9%, bgs., c.l., t.l. works .... lb.	.74	-
tanks, works .... lb.	.65	-
Diphenyl oxide, tech. grade, tanks . lb.	1.11	1.20
Diphenylamine, refd., flake, bgs., t.l., works, frt. equald. .... lb.	1.25	-
molten, tanks, works .... lb.	1.00	-
octylated, flake, bgs., t.l., f.o.b. works .... lb.	7.58	-
Diphenylguanidine, bgs., t.l., frt. ald. .... lb.	2.52	-
Diphenylhydantoin-sodium USP, dms .... lb.	5.00	5.60
Diphenylmethane 4,4,-di-isocyanate, polymeric, bulk, c.l., min. frt. ald. .... lb.	.61	-
Dipropylene glycol, tanks, frt. ald. . lb.	.45	-
Dipropylene glycol monomethyl ether, dms., c.l., divd. .... lb.	.54	-
tanks, same basis .... lb.	.46	-
Di-o-tolylguanidine, powd., dms., t.l., frt. ald. .... lb.	2.62	-
Di-o-tolylthiourea, tech., solid, dms., t.l., frt. ald. .... lb.	3.11	-
Ditridecyl phthalate, tanks, divd. .... lb.	.60	.63
Diundecyl phthalate, tanks, divd. .... lb.	.59	-
Divinylbenzene, 100% basis, tanks works .... lb.	2.75	2.80
dms, 100% basis .... lb.	3.00	2.70
1-Dodecanol, syn., tanks, f.o.b. .... lb.	.76½	-
Dodecenyl succinic anhydride, dms., c.l., t.l., divd. .... lb.	.88	-
Dodecylbenzene (see Detergent Alkylate).		
Dodecylphenol, tanks, min. frt. ald. E .... lb.	.48	.53
Dyes, coaltar, certified colors for food, drugs and cosmetics, 100 lb. and over, frt. prepaid or ald. .		
Blue, FD&C, No. 1 .... lb.	21.20	22.60
No. 2 .... lb.	28.15	29.22
Green, FD&C, No. 3 .... lb.	46.50	65.00
Red, FD&C, No. 3 .... lb.	24.00	24.50
Yellow, FD&C, No. 5 .... lb.	7.45	7.65
No. 6 .... lb.	6.45	6.75
Dyes, coaltar, certified colors for drugs and cosmetics, 100-lb. lots divd.		
Green, D&C, No. 5 .... lb.	38.50	-
No. 6 .... lb.	42.60	-
Red, D&C, No. 4 .... lb.	16.65	-
No. 17 .... lb.	36.90	-
No. 18 .... lb.	36.25	-
No. 22 .... lb.	12.45	-
No. 28 .... lb.	59.95	-
No. 33 .... lb.	48.95	-
Yellow, D&C, No. 7 .... lb.	21.00	-
No. 8 .... lb.	20.55	-
No. 10 .... lb.	46.60	48.85
No. 11 .... lb.	35.25	-
Dyes, coaltar, for general use in cloth and paper dyeing (by Color Index Name), f.o.b. works		
A Bk 1 Blue black ex. conc. .... lb.	5.75	-
Dyes, A Bl 8 Blue 2G .... lb.	5.46	-
A Bl 45 Alizarine Blu SAP 150% . lb.	18.65	-
A Bl 80 Alizarine Br. Cy G .... lb.	14.13	-
A Bl 113 Navy 5R .... lb.	8.55	-
A Gr 16 Gasl 2G 333% .... lb.	22.12	-
A Or 7 11 .... lb.	3.72	-
A Or 8 RD Ex. Conc. .... lb.	4.00	-
A Or 10 Wool Or G .... lb.	4.30	-
A Or 74 Metalized Or GNA .... lb.	6.15	-
A R 20 .... lb.	5.13	-
A R 14 Azo Rubine 133% .... lb.	8.85	-
A R 18 Scarlet 4R Conc. .... lb.	5.45	-
A R 88 Fast Red A. Conc. .... lb.	8.85	-
A R 151 Sik Red 38 Conc. .... lb.	4.50	-
A V 17 58NS Conc. .... lb.	9.75	-
A V 49 4BNS Conc. .... lb.	12.22	-
A Y 17 Fast Light Yell 2G. .... lb.	5.89	-
A Y 23 Tartrazine Ex Conc. .... lb.	6.18	-
B Bl 8 Zinc Free .... lb.	18.40	-
B Br 4 Bismark Brown R Ex. Conc. lb.	4.42	-
B G 1 Jade Crystals .... lb.	9.55	-
B G 4 Malachite Green Crystal. . lb.	8.90	-
B V 1 Methyl Violet Crystals .... lb.	6.80	-
B V 10 Rhodamine B Ex. .... lb.	10.85	-
B Y 2 Bond Yell SFA 150% .... lb.	10.10	-
D Bl 1 Sky Blue 6B Conc. .... lb.	4.62	-
Ex. Conc. 300% .... lb.	9.25	-
D Bl 5 Azurine G Conc. .... lb.	8.46	-
D Bk 22 Fast Black GR .... lb.	2.56	-
Fast Black GR 150% .... lb.	4.28	-
D Br 230 Resin Fast Brown BRNB 200% .... lb.	7.23	-
D Gr 26 Resin Fast Green GL . .. lb.	8.15	-
D R 24B Ex. Conc. .... lb.	7.98	-
D R 31 Brilliant Red 12B Cond. . lb.	8.18	-
D R 80 Fast Red 8BLN .... lb.	8.15	-
D R 81 Paper Red 8BLP .... lb.	8.65	-
D R 251 Fast Scarlet AV .... lb.	8.25	-
D Or 102 Fast Orange WSP Liq. . lb.	2.47	-
WS. Conc. 150% .... lb.	11.25	-
D Y 4 Brilliant Paper Yell 3GX 125% .... lb.	4.68	-
Brilliant Paper Yell 3GX Liq. .... lb.	1.75	-
D Y 11 Stilbene Yellow GA. Ex. Conc. .... lb.	3.03	-
D Y 41 Fast Yellow RGL Conc. 200% .... lb.	8.75	-
D Y 27 Resin Fast Yellow L5G. .... lb.	14.40	-
Ds R 1 Scarlet BA .... lb.	4.28	-
Ds R 6 Pink REL 200% .... lb.	21.00	-
Ds Y 3 Yellow G .... lb.	3.66	-
Ds Y 54 Yellow 3G .... lb.	8.84	-
Ds Or 3 Orange GRA .... lb.	4.81	-
Ds Or 37 Orange GB .... lb.	3.77	-
Ds V 1 4RN Paste .... lb.	7.85	-
Ds V 26 Bordeaux 8V 200% .... lb.	17.25	-
Ds Bl 27 Blue 8GLF .... lb.	10.05	-
Ds Bl 102 Blue GFDA 300% .... lb.	22.80	-
50% Paste .... lb.	4.10	-
V G 1 Jade Green Double Paste . lb.	5.50	-
V Bk 25 Olive TA Paste .... lb.	5.85	-

E

Endrin, tech., 85-98%, dms., t.l. .... lb.	7.00	-
Ephedrine, syn. anhyd., USP, 80-oz. lots .... oz.	1.25	-
Ephedrine hydrochloride, NF, cryst., less than 1,000 kg. .... kilo	38.25	40.25
Ephedrine sulfate, USP, cryst., dms., less than 1,000 kilos .... kilo	43.00	45.25
Epichlorohydrin, tanks, divd. .... lb.	.86	-
Epinephrine base, syn., USP, bots., 100-gram lots .... gram	.60	-
Epoxy resin, liquid, bulk tanks, divd. .. lb.	1.31	1.41
Solid, bgs., t.l. .... lb.	1.26½	1.33½
Epsom salt (see Magnesium sulfate).		
Erythorbic acid, powd., gran., 100 lb. dms., t.l. or mixed t.l. f.o.b. works .... lb.	4.10	4.25
Ester gum, gum-rosin type, dms., c.l., divd., Ill., Md., Ky., E. States, Minneapolis, N.C., Ohio, St. Louis, St. Paul, Va., W. Va. lb.	.75	-
Ester gum, wood-rosin type, dms., c.l., same basis .... lb.	.43	.46
Ethyl acetate, syn., 85-88%, tanks, divd. .... lb.	.41	.41½
99%, tanks, divd. .... lb.	.41½	.42½
Ethyl acetoacetate dms., c.l., divd. . lb.	1.13	-
tanks, divd. .... lb.	1.05	-
Ethyl acrylate, tanks, frt ald. .... lb.	.56	-
Ethyl alcohol, syn., 190 pf., USP tax free, tanks, divd. E. .... gal.	1.65	-

Ethyl alcohol, absolute, 200 pf., tax free prices 12c. higher than 190 pf., tax free.

Ethyl alcohol, fermentation, tanks, f.o.b. works .... gal.	1.08	1.28

Price range attributable to various state tax incentives.

Ethyl alcohol, denat. (see Denatured alcohol, ethyl).		
Ethyl p-aminobenzoate, NF (see Benzocaine).		
Ethyl benzoate, dms. .... lb.	1.35	1.50
Ethyl bromide, tech., 98%, dms., c.l., frt. ald. E. .... lb.	.76	-
Ethyl butyrate, dms. .... lb.	1.35	1.50
Ethyl cellulose, standard vis., 7 cps. bgs., t.l., frt. equald. E. .... lb.	4.55	-
standard vis., 10, 20, 45, 100 cps., t.l., frt. equald. E. .... lb.	4.17	4.22
medium vis., 50, 70, 100 cps., t.l., frt. equald. E. .... lb.	4.25	-
USP vis., 7 cps bgs., t.l., frt. equald. E .... lb.	4.66	-
USP 10,20,45,100 bgs., t.l., frt. equald. E .... lb.	4.59	4.69
VSP (medium) 50,70,100 bgs., t.l., Frt. equald. E. .... lb.	4.51	-
Ethyl chloride, tech., cyls., frt. ald. . lb.	.26	.28½
tanks, frt. ald. .... lb.	.24	.25½
Ethyl cinnamate, dms. .... kilo	41.00	-
Ethyl ethanolamines, mixed dms., t.l., divd E. .... lb.	1.23	-
tanks, divd. E. .... lb.	1.15	-
Ethyl ether, refined, tanks, f.o.b. .. lb.	.48	-
Ethyl hexanoate, dms. .... lb.	4.25	4.75
2-Ethylhexoic acid, dms., c.l., t.l., divd. E. .... lb.	.63	-
tanks divd. E. .... lb.	.57	-
2-Ethylhexyl acrylate, straight or mixed, tanks, frt. ald. E. .. lb.	.79.5	-
2-Ethylhexyl alcohol, tanks, divd. .. lb.	.35	-
Ethyl iodide, cbys., wnks .... lb.	6.25	-
Ethyl linalool, syn. 55-gal. dms. .... lb.	10.60	-
Ethyl linalyl acetate, syn., 55-gal. dms. .... lb.	10.85	-
Ethyl methacrylate, tanks, frt. equald. .... lb.	1.06	-
n-Ethyl morpholine, dms., t.l., frt. ald. .... lb.	2.00	-
tanks, same basis .... lb.	1.62	-
n-Ethyl-a-naphthylamine, dms., works .... lb.	1.04	-
Ethyl oxalate (see Diethyl oxalate).		
Ethyl parathion (see Parathion, ethyl).		
Ethyl silicate dist. (see Tetraethyl orthosilicate).		
Ethyl silicate, 40% available SiO_2, dms., t.l., f.o.b. works .... lb.	1.46	1.48
tanks, f.o.b. works .... lb.	1.39	-
N-Ethyl-m-toluidine, tech., liq., dms., c.l., f.o.b. .... lb.	3.18	-
tanks, same basis .... lb.	3.10	-
N-Ethyl-o-toluidine, dms. .... lb.	2.85	2.90
Ethyl vanillin 100 lb. dms., 500 lbs. or more .... lb.	13.50	-
25 lb. dms., 500 lbs. or more .... lb.	13.75	-
100 lb. dms., less than 500 lbs. .... lb.	14.00	14.60
Ethylamine (see Mono-Di- and Tri-)		
N-Ethylaniline, dms., c.l., t.l., f.o.b. works .... lb.	1.66	-
tanks, same basis .... lb.	1.58	-
Ethylbenzene, bulk, f.o.b. Houston, Tex. .... lb.	.22	.23
Ethylene, contract, divd. .... lb.	.18	.18½
Ethylene brassylate, dms. .... lb.	18.00	18.25
Ethylenediamine, 99%, tanks, f.o.b. works .... lb.	1.30	1.305
Ethylenediamine dihydriodide .... lb.	7.55	8.25
Ethylenediamine tetraacetic acid, tetrasodium salt, soln., t.c., t.t., frt. equald. .... lb.	.35½	-
Ethylene dibromide dms., c.l., frt., equald. .... lb.	.38	.46
tanks, frt. equald. .... lb.	.32	.42
Ethylene dichloride, tanks, f.o.b. works .... lb.	.17	.17¼
Ethylene glycol, indust., tanks, frt. ald. .... lb.	.31	-
Ethylene glycol, monobutyl ether, tanks, divd. E. .... lb.	.41½	-
Ethylene glycol monoethyl ether, tanks, divd. E. .... lb.	.61	-
Ethylene glycol monomethyl ether, tanks, divd. E. .... lb.	.34	-
Ethylene glycol monobutyl ether acetate, tanks, frt. ald. E. .... lb.	.64½	-
Ethylene glycol monoethyl ether acetate, tanks, ft. ald., E. .... lb.	.55½	-
Ethylene glycol monomethyl ether acetate, tanks, frt. ald. E. .... lb.	.43	-
Ethylene oxide, tanks f.o.b. .... lb.	.35	.45
Ethylene trichloride (see Trichloroethylene).		
Eucalyptol, NF, dms. Portuguese .kilo.	7.50	-
Eucalyptus oil, Portuguese NF, rectified, 70-75%, dms .... kilo	5.50	-
NF, rectified, 80-85%, dms kilo	6.25	-
Eugenol, USP, dms. .... kilo	7.55	-

F

Fennel oil, sweet, USP, cns. .... kilo	9.00	-
Fennel seed, Egypt .... lb.	.33	-
Indian .... lb.	.80	.82
Fenugreek seed, Indian, bgs. .... lb.	.25	.32
Ferric chloride anhyd., tech., 350-lb. dms., c.l., works .... 100 lbs.	36.00	-
Ferric chloride, 42 Bé. photo grade dms., c.l., works .... 100 lbs.	9.10	-
Ferric chloride, sewage grade, 100 percent basis, f.o.b. works, tank works .... ton	176.00	255.00
Ferric nitrate, cryst., dms., t.l., f.o.b. lb.	.64	-
Ferric oxalate, tech., gran., 60-lb. dm., f.o.b. works .... lb.	1.65	-
Ferric oxides (see Iron Oxides).		
Ferric phosphate, FCC insoluble powder, dms, 10,000 lbs. .... lb.	1.10	1.15
Ferric pyrophosphate, soluble, purif., pearls, 50-lb. dm. .... lb.	1.11	-
Ferric resinate, precip., 6.75% Fe. dms., ton lots frt. ald. .... lb.	.45	-
Ferric sulfate, partly hydrated, 100-lb. bgs., c.l., works .... ton	141.00	-
bulk, works .... ton	117.00	-
Ferric ammonium citrate, NF, brown, green gran. 100 lb. dms., 2,000 lb. min., f.o.b. shipping pt. .... lb.	2.00	2.95

2c. per pound surcharge for shipments W. of Denver

Ferric-ammonium oxalate, fine gran., 250-lb. dms., t.l., f.o.b. works. E. .... lb.	.42	-
Ferric hydroxyethylene diaminetriacetic acid, industrial grade, sodium salt, soln., 4.5% Fe, t.c., t.t., f.o.b. works .... lb.	.65	-
agricultural grade, sodium salt solution, 5% Fe, t.c., t.t., f.o.b. works .... lb.	.64	-
Ferrous fluoborate liq. conc., dms., t.l., works, frt. equald. .... lb.	.64	-
Ferrous gluconate, NF, t.l., works E. lb.	2.25	-
Ferrous naphthenate, liq., 6%, Fe. dms., divd. .... lb.	1.17	-
Ferrous sulfate, moist, bulk, t.l. f.o.b. works .... ton	30.00	-
heptahydrate, gran., bulk, t.l., f.o.b. works .... ton	145.00	150.00
monohydrate, gran., bulk., t.l., f.o.b. works .... ton	170.00	180.00
USP, powd., 400-lb. dms. .... lb.	.46	-
cryst., 250-lb. dms. .... lb.	.61	-
Fir oil, Canada dms. .... lb.	10.20	-
Siberia, dms. .... lb.	6.75	.75
Fish oil, refd., alkali, tanks, c.l. .... lb.	.29	-
kettle-bodied, tanks .... lb.	.32	.36
light, cold-pressed, dms., c.l. .... lb.	.34	-
tanks .... lb.	.26	-
Fishmeal, dom., menhaden, 60% protein grd., bulk, f.o.b. Atlantic port .... ton	265.00	-
f.o.b. Gulf port .... ton	260.00	-
Imp., Chilean, 65% protein min., bulk, c.l., t.l., ex whse., f.o.b. Atlantic and Gulf ports. .. ton.	265.00	-
Fluoboric acid, dms., t.l., works, frt. equald .... lb.	.70	-
Fluorocarbon, No. 11 bulk, tanks, deivd. .... lb.	.57	.84
No. 12, bulk, same basis .... lb.	.68	.74
No. 22, bulk, same basis .... lb.	1.05	1.14
No. 113, bulk, same basis .... lb.	.89	.93½
No. 114, bulk, same basis .... lb.	1.02	1.08
Fluosilicic acid (see Hydrofluosilicic acid).		
Formaldehyde, 37% methanol free (uninhibited) divd., gulf .... lb.	.089	.0905
44-45% (1% methanol) tanks, divd. .... lb	.1015	.1065
37% (inhibited 7% methanol, divd. .... lb.	.0945	.1025
37% (inhibited 11-15% methanol) tanks, divd. .... lb.	.1055	.1060
Formamide, tanks, f.o.b. .... lb.	.39	-
dms., same basis .... lb.	.44	-
Formic acid 90% tanks, f.o.b. works .... lb.	.36½	-
85% dms., c.l., works .... lb.	.51½	-
Fructose, cryst., 18,000 kilos or more, dms. .... lb.	.90	1.03
Fumaric acid, food grade, bgs. t.l., frt, equald. E. .... lb.	.75½	.77½
tech. grade, bgs., t.l., f.o.b. frt. equald .... lb.		.62½
Furfural, tanks, f.o.b. Cedar Rapids, Iowa, and Belle Glade, Fla. lb.	.76	-
Furfuryl alcohol, tanks, f.o.b. Memphis, Tenn. and Omaha, Neb. .. lb.	.72	-

G

G salt, dms., frt. ald. 100% basis .. lb.	2.30	-
Gallic acid, 400-kilo lots .... kilo	23.05	-
Garlic oil, dms., Egyptian .... kilo	85.00	105.00
Gelatin, edible, 100 AOAC test, dms., l.t.l., divd. .... lb.	1.60	1.75
125 AOAC test, dms., l.t.l. .... lb.	1.75	1.85
150 AOAC test, dms., l.t.l. .... lb.	1.85	1.95
175 AOAC test, dms., l.t.l. .... lb.	1.95	2.05
200 AOAC test, dms., l.t.l. .... lb.	2.05	2.15
225 AOAC test, dms., l.t.l. .... lb.	2.10	2.25
250 AOAC test, dms., l.t.l. .... lb.	2.20	2.35
275 AOAC test, dms., l.t.l. .... lb.	2.30	2.45
300 AOAC test, dms., l.t.l. .... lb.	2.50	2.66
Gentian violet (see Methyl rosaniline chloride).		
Geraniol, syn., 90-92%, dms. .... lb.	6.25	-
nat., 90-92%, dms. .... lb.	3.50	-
syn. 96-98%, dms. .... lb.	6.75	-
Geranium oil, Moroccan .... lb.	24.00	27.50
Bourbon .... lb.	33.00	38.00
Chinese .... kilo	70.00	65.00
Egypt .... lb.	53.00	-
Turkish (see Palmarosa oil).		
Geranyl acetate, dms. .... lb.	5.44	6.00
nat., dms. .... lb.	10.95	-
Geranyl formate, syn., dms. .... lb.	6.60	-
nat., dms. .... lb.	15.95	-
Gilsonite, g.p., bulk, c.l., f.o.b. Bonanza, Utah .... ton	190.00	-
selects, same basis .... ton	190.00	-
Ginger, Cochin, bgs. .... lb.	.65	-
Chinese sliced .... lb.	.58	.70
Ginger oil, African, dms. .... lb.	75.00	-
Indian .... kilo	70.00	85.00
Ginger oleoresin, NF, bots. .... lb.	30.00	-
Glauber's salt (see Sodium sulfate).		
Gluconic acid tech, 50% dms., c.l. t.l., f.o.b. works .... lb.	.50	-
tanks, same basis .... lb.	.44	-

CHEMICAL PRICES

WEEK ENDING AUGUST 8, 1986

Glue, bone, extracted, green, jellygrams, bgs., c.l. .... lb.	-	-
85 jellygrams, bgs., c.l., f.o.b. .. lb.	.86	-
115 jellygrams, bgs., c.l., f.o.b. .. lb.	.78	-
135 jellygrams, bgs., c.l., f.o.b. .. lb.	.77	-
164 jellygrams, bgs., c.l., f.o.b. .. lb.	.78	-
182 jellygrams, bgs., c.l., f.o.b. .. lb.	.87	-
220 jellygrams, bgs. c.l. f.o.b. .... lb.	.93	-
Glue, hide,		
106 jellygrams, bgs., t.l., f.o.b. .... lb.	.80	-
135 jellygrams, bgs., t.l., f.o.b. .... lb.	.85	-
164 jellygrams, bgs., t.l., f.o.b. .... lb.	.90	-
192 jellygrams, bgs., t.l., f.o.b. .... lb.	.95	-
222 jellygrams, bgs., t.l., f.o.b. .... lb.	1.00	-
251 jellygrams, bgs., t.l., f.o.b. .... lb.	1.05	-
283 jellygrams, bgs., t.l., f.o.b. .... lb.	1.10	-
315 jellygrams, bgs., t.l., f.o.b. .... lb.	1.15	-
347 jellygrams, bgs., t.l., f.o.b. .... lb.	1.20	-
379 jellygrams, bgs., t.l., f.o.b. .... lb.	1.25	-
411 jellygrams, bgs., t.l., f.o.b. .... lb.	1.30	-
444 jellygrams, bgs., t.l., f.o.b. .... lb.	1.35	-
477 jellygrams, bgs., t.l., f.o.b. .... lb.	1.40	-
Glutamic acid, 86½% dms., 100-lb. lots, frt. ald. .... kilo	6.65	-
Glycerine, nat., refd., USP, CP 99½% tanks, divd. .... lb.	.86½	-
USP, CP, nat. 96%, tanks, divd. . lb.	.87¾	-
Syn. 96%, tanks divd. .... lb.	.89¼	-
Syn. 99.5%, tanks divd. .... lb.	.91	-
Glycine (see Aminoacetic acid).		
Glyceryl guaiacolate, 100-lb. fib. dms. f.o.b. .... kilo	14.50	-
Glycolic acid (see Hydroxyacetic acid)		
Glyoxal 40% soln., bulk, tanks, divd. .... lb.	.44½	-
Grapefruit oil, Fla., dms. .... lb.	2.75	-
Calif., dms. .... lb.	2.25	-
Israel .... lb.	2.25	-
Graphite, amorph, powd., bgs., dms., ex whse. .... lb.	.15	.40
crysl., 88-90%, powd., bgs., dms., ex whse. .... lb.	.30	.60
Graphite, crysl., 90-82%, powd., bgs., dms., ex whse. .... lb.	.40	.75
95-95% powd., bgs., dms., ex whse. .... lb.	.60	.80
Graphite, amorph., crysl., 97% and up, powd., bgs., dms., ex whse. .... lb.	.80	1.20
Graphite, flake, No. 1, 90-85%, bgs., dms., ex whse. .... lb.	.65	.75
No. 2, 80-95%, bgs., dms., ex whse. .... lb.	.85	.75
Grease (See Oils, Fats & Waxes market report)		
Grease oil (See Lard oil).		
Guaiacol, tech., 500-lb dms., 24,000 lb. min., f.o.b. Wallingford, Conn. .... lb.	2.70	-
NOTE: Purified grades are 10c. higher		
Guaiacwood oil, dms. .... lb.	2.60	-
Guar gum, edible, bgs., c.l., f.o.b. ship't. pt. .... lb.	.50	.75
Indust., bgs., high viscosity, c.l., same basis .... lb.	.50	.65

H

Heliotropin, dms. .... lb.	8.00	8.25
Hemlock oil (see Spruce oil).		
Henbane leaves, bls. .... lb.	.55	-
Heptane, indust., tanks, f.o.b. Beaumont, Tex. .... gal.	1.07	-
85%, tanks, f.o.b. Houston, Tex. .... gal.	1.18	-
Heptanoic acid, syn., tanks, f.o.b. .... lb.	.65	-
1-Hexadecanol, syn., tanks, f.o.b. .. lb.	.48½	-
Hexahydrophthalic anhydride, tech dms., t.l., f.o.b. works .... lb.	1.42	-
Hexamethylenetetramine, gran. bgs., c.l., t.l., works .... lb.	.55	-
gran. dms., c.l., t.l., works .... lb.	.59	-
pdr. bgs., c.l., t.l., works .... lb.	.60	-
powd. dms, c.l., t.l., works .... lb.	.63	-
Hexane, indust., tanks, works .... gal.	1.01	1.15
85%, tanks, f.o.b. Houston, Tex. .... gal.	1.12	-
1-Hexanol, syn., tanks, f.o.b. .... lb.	.50	-
Hexyl alcohol, mixed isomers, tanks .... lb.	.32	-
p-Hexyl methacrylate, dms., c.l., works .... lb.	.75½	-
Hexylene glycol, tanks, divd. .... lb.	.50	-
Hexylresorcinol, USP, dms., 25-lb. lots or more, frt. ald. .... lb.	80.00	-
Homatropine hydrobromide, USP, 10-100-oz. lots, bots. .... oz.	10.25	11.30
Homatropine methylbromide, USP, 10-250 oz. lots, bots. .... oz.	8.70	10.70
Horehound herb, bls. .... lb.	.25	.28
Hydrazine hydrate, 85%, t.l., frt. ald. .... lb.	1.64	-
55-gal. dms., t.l., frt. ald. .... lb.	1.81	-
Hydriodic acid, purif., 47%-57%, 2-cbys., f.o.b. works .... lb.	7.50	-
Hydroabietyl alcohol, tech., solid, dms., c.l., f.o.b. zone 1 .... lb.	.65	-
tanks, f.o.b. zone 1 .... lb.	.60	-
Hydrobromic acid, 48% dms., c.l. t.l., f.o.b. .... lb.	.38½	-
Hydrochloric acid, anhyd. (see Hydrogen chloride).		

CHEMICAL PRICES

WEEK ENDING AUGUST 8, 1986

Hydrochloric acid, 20° Be, tanks, works, East .... ton	55.00	65.00
Midwest .... ton	60.00	70.00
Gulf Coast .... ton	57.00	–
West Coast .... ton	90.00	105.00
22° acid, same basis, East ..... ton	68.00	76.00
Midwest .... ton	58.00	70.00
Gulf Coast .... ton	63.50	–
West Coast .... ton	100.00	115.00
NOTE: Prices vary and are either freight collect freight equalized depending on producer and location.		
Hydrocortisone acetate, micronized, dms., 25 kilos or more . gram.	.70	–
Hydrocortisone, alcohol, micronized, dms., 25 kilos or more . gram.	.70	–
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)		
Hydrofluoric acid, aqueous. 70% tanks., f.o.b. frt. equald. .... 100lbs.	43.00	–
Hydrofluosilicic acid, 15-gal. dms., t.l., works, 30% basis .... ton	151.00	–
tanks, 100% basis, works. ..... ton	100.00	140.00
Hydrogen bromide, anhyd. cyls., extra, 30,000-lbs., f.o.b. works. . lb.	7.00	–
Hydrogen chloride, anhyd., 50-lb. cyls., c.l., works. .... lb.	.65	–
600-lb. cyls., c.l., same basis. . lb.	.82	–
Hydrogen chloride, anhyd., tube trailers, seller's trailer, min. 100,000 lbs. a year ...... lb.	.37	–
tube trailers, buyer's trailer ..... lb.	.27	–
Hydrogen chloride anhyd., tanks, works. .... ton	270.00	–
Hydrogen cyanide, liq., 99.5%, tanks, works .... lb.	.50	–
Hydrogen fluoride, anhyd., tank cars c.l., f.o.b., frt. equald. ..... lb.	.6875	–
Hydrogen peroxide, 35% tech., tanks, works, ft. equald. .... lb.	.2325	–
50% tankcars, frt. equald. ..... lb.	.3225	–
70%, tankcars frt. equald. ..... lb.	.45	–
Hydrogen sulfide, liq., 88.25% min. seller's tanks, works. ..... lb.	.12	.13
170 lb. cylinders .... lb.	2.27	–
Hydroquinone, photo grade, consumers. c.l., t.l., divd .... lb.	2.54	–
tech., dms. c.l., divd. .... lb.	1.95	–
Hydroxyacetic acid, tech., 70%, tanks, Belle, W. Va. .... lb.	.49½	–
Hydroxylammonium sulfate, dms., t.l., f.o.b. .... lb.	.83	–
p-Hydroxybenzene sulfonic acid (see p-Phenolsulfonic acid).		
Hydroxybutyl methylcellulose (visc. 12,000 cps.) 50 lb. bags, t.l., cl. 30,000 lb. min., divd., zone 1 .... lb.	2.10	–
Hydroxycitronellal dimethyl acetal, dms. .... lb.	16.55	–
p-Hydroxydiphenylamine, dms., t.l., f.o.b. works .... lb.	4.10	–
Hydroxycitronellal, natural, dms. .... lb.	8.40	–
pure, dms. .... lb.	13.60	–
extra grade, dms. .... lb.	14.80	–
syn., dms. .... lb.	8.50	–
Hydroxyethyl cellulose, t.l., divd .... lb.	2.07	2.12
Hydroxyethyl methylcellulose (visc. 5,000 through 45,000 cps.) 50 lb. bags, t.l., c.l., 30,000 lb. min., divd., zone 1 .... lb.	2.73	–
Hydroxypropyl methylcellulose, premium, U.S.P. (visc. 4,000 through 15,000) 50 lb. bags, t.l., c.l., 30,000 lb. min., divd., zone 1 .... lb.	2.87	–
Hydroxypropyl methylcellulose, U.S.P (visc. 50 through 100 cps) 50 lb. bags, t.l., c.l., 30,000 lb. min., divd., zone 1 .... lb.	2.99	–
Hydroxypropyl methylcellulose (visc. 4,000 through 15,000 cps) 50 lb. bags, t.l., c.l., 30,000 lb. m., divd., zone 1 .... lb.	2.17	–
Hydroxypropyl methylcellulose (visc. 50 through 100 cps) 50 lb. bags, t.l., c.l., 30,000 lb. min., divd., zone 1 .... lb.	2.64	–
8-Hydroxyquinoline (see Oxyquinoline)		
Hypophosphorous acid, purif., 50% dms., c.l., works .... lb.	3.15	–

I

Ichthammol. NF. 200-kilo dms. .... lb.	4.25	4.50
Iminodiacetic acid, 96% min., dms., c.l., t.l., works. .... lb.	3.00	–
Indole, dms. .... lb.	25.50	–
Inositol, 50-kilo dms., 1000 kilos or more, f.o.b. works. ...... kilo	17.50	22.00
Iodine, crude, dms. .... kilo	16.50	18.00
Iodine USP .... lb.	14.21	14.59
Iodochlorhydroxyquin, USP, XVI 50-kilo dms., 100-499 kilos, frt. alld. .... kilo.	35.00	48.00
Iodoform, NF, dms., 300-lbs., f.o.b. works .... lb.	24.00	–
a-Ionone, dms. .... lb.	18.20	–
b-Ionone, dms. .... lb.	13.10	–
Ipecac root, whole, bgs. .... lb.	25.00	–
Irish moss, bleached, prime, whole .... lbs.	.65	.60
Iron blue, alkali-resistant, bgs., f.o.l., (on lots, div. E. .... lb.	2.70	–
Iron blue, reg., bgs., l.c.l., ton lots, same basis. .... lb.	2.00	2.15
Iron, purif., powd., pells, 10-100-lb. lots. .... lb.	1.00	–
Iron oxide, black, syn., bgs., c.l., frt. equald. .... lb.	.38¼	.44
Iron oxide, brown, syn., bgs., c.l., frt. equald. .... lb.	.36	.44¼
Iron oxide, metallic brown, l.c.l., bgs., frt. equald. .... lb.	.13	.15
Iron oxide, nat., red, dom., pure, bgs., c.l., works. .... lb.	.435	–
Iron oxide, yellow, ... lb.	.18	–
syn., bgs., c.l., frt. equald. . . lb.	.4275	–
Iron oxide, buff, nat., dom, bgs., c.l., t.l., works, light. .... lb.	.055	–
dark .... lb.	.044	–
other shades. bgs.. c.l., frt. equald. .... lb.	.34½	.36½
Isatoic anhydride, bgs., f.o.b. works lb.	1.40	–
Isoamyl alcohol, 95% tanks, frt. alld. .... lb.	1.44	1.48
Isoborneol, 100 lb. dms. .... lb.	7.25	–
Isobornyl acetate, dms. .... lb.	.80	1.15
Isobutyl acetate, solvent grade, tanks, frt. alld. .... lb.	.45	.48
Isobutyl acrylate, tanks, frt. alld. E. . lb.	.71	–
Isobutyl alcohol, tanks, divd ...... lb.	.29	–
Isobutylene, 99%, tanks, f.o.b. works .... lb.	.32	–
Isobutyl isobutyrate, tanks, f.o.b. works .... lb.	.42½	–
Isobutyl methacrylate, tanks, divd. . lb.	.97	–
Isobutyl phenylacetate, dms. ..... lb.	3.10	3.60
Isobutyl salicylate, dms. .... lb.	3.45	–
Isobutyraldehyde, tech., dms., c.l., divd. .... lb.	.43	–
tanks, divd. .... lb.	.35	–
Isobutyric acid, dms., c.l., t.l., divd. . lb.	No Prices	
tanks, same basis .... lb.	.75	
Isobutyronitrile, dms., c.l., f.o.b. works frt. collect. .... lb.	.84	–
tanks, same basis .... lb.	.75	–
Isoeugenol, dms. .... lb.	5.20	5.60
Isoniazid, powd. .... kilo	12.00	–
Isonicotinic acid, hydrazine (see Isoniazid).		
Isononyl alcohol, dms., t.l. .... lb.	.48	–
Iso-octyl alcohol, tanks, divd. ..... lb.	.44	–
Isophorone, tanks divd. .... lb.	.81	–
Isophthalic acid, 99%, bulk, f.o.b., Joliet, Ill., min. frt. alld. .... lb.	.48	–
Isophthalonitrile, bgs., t.l., works. . lb.	2.65	–
Isopropyl acetate, tanks, divd. .... lb.	.47	–
Isopropyl alcohol, anhyd., 99%, tanks, divd. .... gal.	1.38	–
refd., 85%, tanks, divd .... gal.	1.31	–
refd., 91%, tanks, divd .... gal.	1.25	–
Isopropyl ether, tanks, divd ...... lb.	.44	–
crude, tanks, divd .... lb.	.37	–
Isopropylamine. (see Mono-, Di- or Tri-).		
Isopropyl myristate, dms., t.l., E. ... lb.	1.18	1.50
Itaconic acid, refd. bgs t.l. .... lb.	1.45	1.48

J

J acid, paste, dms., works, 100% basis. .... kilo	4.75	–
Japan wax, cs. .... lb.	5.50	5.50
Jojoba oil, 55-gal. dms., f.o.b. Arizona producing point .... gal.	55.00	60.00
Juniper berry oil, Italian .... kilo	47.00	–

K

Kaolin, water washed, fully calcined, bags c.l., f.o.b. Georgia .. ton	255.00	–
NF pwd., colloidal, bacteria controlled, 50 lb. bags., 5,000 lb. lots. .... lb.	.24	–
Kaolin, uncalcined. No. 1 coating, bulk, c.l., f.o.b., Georgia ...... ton	94.00	–
No. 2 coating .... ton	75.00	–
No. 3 coating .... ton	73.00	–
No. 4 coating .... ton	70.00	–
filler, gen.l purpose, same basis. .... ton	58.00	–
delaminated water washed, uncalcined paint grade 1 micron avg., same basis. ...... ton	182.00	–
dry-grd. airfloated soft, same basis. .... ton	60.00	–
Karaya gum, No. 1, powd., bbls. ... lb.	2.25	–
No. 2, powd., bbls. .... lb.	1.95	–
Kola nuts, bgs. .... lb.	.49½	.51

L

Lacquer diluent petroleum, 140F.-200F. b.r., t.o., New Jersey and New York .... gal.	1.28	–
, Houston, Texas .... gal.	1.29	–
Lacquer diluent, petroleum 200F.-240F. b.r., tankcars, New York and New Jersey .... gal.	1.20	1.25
Houston, Tex. .... gal.	1.12	–
Lactic acid, food grade 88%, t.o., f.o.b. works .... lb.	1.06	–
50%, t.o., frt. equald. .... lb.	.62	–
tech., 88%, t.o., frt. equald. ... lb.	1.03	–
Lactose, edible, rag. bgs., c.l., works. .... lb.	.22	.26
Lactose, ferment grade, bgs., c.l., works. .... lb.	No Prices	
Lactose, USP, reg. dms., c.l., t.l., frt. equald. .... lb.	.55	.69
USP, reg. dms., 10,000-lb. to t.l. lots, frt. equald. .... lb.	No Prices	
Lactose, USP, spray dried, bgs., t.l., frt. equald. .... lb.	.60	–
bgs., 10,000-lb. to t.l. lots, frt. equald .... lb.	No Prices	
Lake C, red toner. (red 53) bbls., frt. alld. .... lb.	5.70	
Lanolin, anhyd., cosmetic. 400-lb. dms., works. .... lb	1.18	1.25
pharmaceutical. 400-lb. dms works .... lb	1.15	–
tech., (under 2% f.f.a.), 400-lb. dms., works. .... lb	1.08	1.13
Lard (See Oils, Fats & Waxes market report)		
Lard oil, No. 1, dms., c.l., f.o.b .... lb	34	
tanks, same basis .... lb.	28	
Lard oil, extra, winter-strained, dms., c.l. .... lb	41	
tanks, same basis .... lb	33	
prime, burning, dms., c.l., same basis. Chicago. .... lb	43	–
prime, burning, tanks, same basis. .... lb	.35	–
NOTE: 300 Mi. rad. 1½c. higher, except Texas, 2c. and West Coast, 3c. higher.		
Laurel leaves, Turkish .... lb.	.50	58
Laurent's acid, drums, f.o.b. ...... lb	3.83	–
Lauric acid, coml., pure bgs., c.l ... lb	.65	.71
Lauric aldehyde (aldehyde C-12). dms. .... lb.	7.75	–
n-Lauryl methacrylate, dms., c.l., t.l., works. .... lb.	1.72	–
Lavandin oil, Abrials, 30-32%, dms. lb.	4.00	–
Lavender flowers, ord. .... lb.	.55	75
medium, bls. .... lb.	80	80
select. bls. .... lb	1.10	1.19
Lavender flower oil, NF, French, ... 40-42%, ester, cns. .... lb	8.25	13.50
spike, Spanish, dms. .... kilo	15.00	22.00
Lead acetate, purif., flake. 400-lb. dms., works. .... lb.	.48	–
tech., flake, t.l., 400 lb. dms., works. .... lb.	.37	–
Lead blue, basic, sulfate, bbls., c.l., ship.t. pt., f.o.b. .... lb.	.87	–
Lead carbonate. (see Lead white basic carbonate).		
Lead chloride, 400-lb. dms., works. lb.	3.25	–
Lead dioxide, tech., powd., 200-lb. dms., t.l., works. .... lb.	.66	.70
Lead fluoborate, liq. conc., dms., t.l., works, frt. equald .... lb.	55	–
Lead metal, divd .... lb.	.18	.18½
Lead monosilicate, milled, bgs., c.l., f.o.b. works .... lb.	.58½	–
coarse, bgs., c.l., same basis. ... lb.	.57½	–
Lead naphthenate liq., 24% Pb. dms., frt. alld. .... lb.	.93	–
Lead nitrate tech., cryst., 400-lb. dms., t.l., works. .... lb.	.32½	–
Lead peroxide (see Lead dioxide).		
Lead red, 95% Pb_3O_4, or less, bgs. c.l., works. .... lb.	.37	–
Lead red, 97% Pb_3O_4, bgs. c.l., works. .... lb.	.37½	–
Lead, red, 98% Pb_3O_4, bgs., c.l., same basis. .... lb.	.37½	.40½
Lead silicate (see Lead, white, basic silicate).		
Lead silicochromate, bgs., c.l., works. .... lb.	.35	–
Lead sulfate (see Lead, blue, basic sulfate and Lead, white, basic sulfate)		
Lead, white, basic carbonate, bgs., c.l., frt. alld. .... lb.	.52	–
Lead, white, basic, silicate, bgs., c.l., same basis. .... lb.	.87	–
Lead, white, basic sulfate, bgs., c.l., same basis. .... lb.	.66	–
Lecithin, edible, tech., bleached, non-ret. dms., l.c.l., works. .... lb.	.36	–
unbleached non-ret. dms., l.c.l., same basis. .... lb.	.34	–
edible, tech. bleached, non-ret., dms., t.l., works .... lb.	.28	–
unbleached, non-ret., dms., t.l., same basis. .... lb.	.28	–
Lemon oil, Argentine .... kilo	14.00	–
Brazil .... lb.	6.50	7.00
Calif., USP, dms. .... lb.	9.00	9.35
Italian .... lb.	12.50	–
Lemongrass oil, Indian, dms. ..... kilo	11.25	–
Guatemalan, dms. .... lb.	2.25	–
dl-Leucine, dms., 1 kilo works. ... kilo	60.00	80.00
Licorice root, whole, bls. .... lb.	.40	.60
gran., bls. .... lb.	.70	.90
powd., bls. .... lb.	.85	–
Lignosulfonate (see under Ammonium or Sodium lignin sulfonate).		
Lime, chemical, pebble (quicklime), bulk, 50,000 lbs., works, f.o.b. plants .... ton	39.00	45.00
Lime, chemical, hydrated, bulk, same basis. .... ton	46.00	50.00
bgs., same basis. .... ton	54.00	57.00
Lime, NF, purif., 100-lb. dms. ..... lb.	.68	–
Lime oil, dist., Mexican, dms. ..... lb.	6.00	–
Haitian, dist., dms. .... lb.	5.00	–
expressed, dms. .... lb.	17.50	–
Lime salts (see Calcium).		
d-Limonene, dms. .... kilo	.70	.85
Linalool ex bois de rose oil, dms. .... lb.	5.35	–
syn., 98-100% dms., f.o.b. works. . lb.	2.93	–
Linalool oxide, syn., 55-gal. dm. ... lb.	7.75	–
Linalyl acetate ex bois de rose oil, 90-92%, dms. .... lb.	18.00	21.00
syn. 98-100%, dms., f.o.b. works. lb.	3.10	–
Linalyl benzoate, syn., 55-gal. dms. lb.	6.00	–
Linalyl cinnamate, syn., 55-gal. dms. .... lb.	59.85	–
Linalyl formate, syn., 55-gal. dms. . lb.	7.75	8.50
Linalyl isobutyrate, syn., 55-gal. dms. .... lb.	6.60	6.65
Lindane, 20% formulation, dms., divd .... gal	13.10	–
99.9% tech., dms., t.l., divd .... lb.	6.60	–
Linalyl propionate, syn., 55-gal. dms. .... lb.	7.90	–
Linden flowers, with leaves, bls. ... lb.	.78	.85
without leaves, bls. .... lb.	.90	1.15
Linseed meal (see Oils, Fats & Waxes market report).		
Linseed oil, (see Oils, Fats & Waxes market report)		
Linseed oil fatty acid, dist., dms. ... lb.	.60	.67
tanks. .... lb.	.53	.62
Litharge, com.l., powd., bgs., c.l., works. .... lb.	.36½	.60
Lithium bromide, anhyd., dms., ton lots, divd. .... lb.	6.27	–
soln., same basis. .... lb.	4.00	–
Lithium carbonate, powd., bgs., c.l., t.l., divd. .... lb.	1.60	–
Lithium chloride, anhyd., c.l., t.l., divd. .... lb.	3.32	–
soln., dms., c.t., t.l., divd. .... lb.	2.94	–
Lithium fluoride, dms., c.l., t.l., divd. lb.	4.90	–
Lithium hydrate, c.l., t.l., divd 10,000 or more .... lb.	23.50	–
Lithium hydroxide monohydrate, dms., c.l., t.l., divd .... lb.	1.93	–
Lithium hypochlorite, c.l., t.l., works lb.	1.07	–
Lithium metal 1000 lb lots or more, divd .... lb	22.70	–
Lithium nitrate, tech., dms., 100-lb. lots .... lb.	3.25	–
Lithium stearate bgs., c.l., frt. alld. . lb.	1.01	–
Lithium sulfate, anhydrous, t.l. divd. lb.	3.09	–
Lithol red toner, barium, dms., frt. alld .... lb.	3.27	–
calcium dms., same basis. ... lb.	3.50	–
Lithol rubine toner (red 57), resinated, dms., frt. alld. .... lb.	5.60	–
Locust bean gum powd., bgs .... lb.	6.00	6.75
2,4-Lutidine dms., t.l. frt. equald. kilo	6.75	–
Lycopodium, 50-lb dms .... lb	8.00	10.00
L-Lysine monohydrochloride, feed grade, 10,000 lbs divd .. lb.	1.35	1.40

M

Mace, East Indian, siftings .. . lb	5.00	5.10
Sauce #2 .. lb.	4.80	–
Magnesia, tech., light, neoprene grade, bgs., c.l., t.l., works lb	.76	.81
Magnesia, syn., tech., chemical grade, bulk, c.l., t.l. works . ton	330.00	–
bags, c.l., t.l., same basis . ton	365.00	–
deadburned, bulk, same basis .... ton	392.00	–
bgs., same basis . ton	409.00	–
Magnesia, nat., tech., heavy, 85%, 150 mesh, bulk, c.l., t.l., f.o.b. Nev. . ton	232.00	–
90%, 325 mesh, same basis. ton	265.00	–
Magnesium bromide, 60-lb dms., hexahydrate lb.	2.50	–
Magnesium carbonate, light, tech., bgs., c.l., t.l., works, frt. equald . lb	.73	[illegible]
USP, lite bgs., c.l., same basis lb	.74	[illegible]
USP, heavy, bgs., c.l., same basis . lb	.83	–
Magnesium chloride, anhyd., 92%, flake or pebble dms., c.l., works . lb	.12½	[illegible]
Magnesium chloride, hydrous, 99%, flake, bgs., c.l. works.. lb.	.14½	–
Magnesium gluconate, 100-lb dms f.o.b works, E ... lb	4.25	–
Magnesium hydroxide, NF, powd., dms., c.l., t.l., works frt. equald .... lb.	.78	–
Magnesium lauryl sulfate, tanks, f.o.b. works ..... lb	22	.26½
Magnesium metal, 90.0%, ingots, 10,000-lb lots or more, f.o.b Freeport, Tex. .. lb	1.53	–
die casting alloys ..... lb.	1.29	1.33
Magnesium nitrate, tech., flake, 250-lb dms., t.l., works ...... lb.	.32	–
Magnesium oxide, USP, light, bgs., c.l., works, frt. equald .... lb.	1.85	–
heavy, dms., c.l., same basis. ... lb.	1.54	–
Magnesium oxide, tech (see Magnesia).		
Magnesium phosphate, tribasic, tech. 00 lb. bgs., f.o.b. .... lb.	1.00	–
Magnesium silicate (see Talc).		
Magnesium silicofluoride, bgs., c.l., t.l. works. .... lb.	.1645	.1[illegible]
Magnesium stearate, bulk, t.l. ..... lb.	.85	1.[illegible]
Magnesium sulfate 10% Mg (epsom salts), tech., bgs., t.l., works. .... lb.	.14	–
bulk, same basis .... lb.	.13	–
USP, cryst., bgs., same basis . lb.	.13½	–
USP, cryst., bulk, same basis . lb.	.14½	–
Magnesium sulfate, 17% Mg, (synthetic monohydrate), tech. bgs. t.l., works .... lbs.	.80	–
CP, same basis .... lbs.	1.25	–
Magnesium sulfate, anhydrous, CP bgs., t.l., works .... lbs.	1.75	–
Magnesium sulfate trihydrate, tech., bgs., t.l., works .... lb.	.45	–
Magnesium trisilicate, USP, powd., lb. dms, 5,000-lb. lots ...... lb.	.38	–
USP, micronized powd., dms., 375-lb. lots .... lb.	.83	–
Malathion, tech., dms., t.l., works. . lb.	1.3[illegible]	–
Maleic acid, cryst., powd., drums, 100 kilos, f.o.b .... kilos	3.[illegible]	–
drums, tons, f.o.b. .... kilos	2.[illegible]	–
Maleic anhydride, bgs., t.l., works, frt. equald .... lb.	.56	[illegible]
tanks, works, frt. equald .... lb.	.53	–
Malic acid, purif, and food grades. 50-lb. bgs., t.l., c.l., divd. .... lb.	.81	[illegible]
Mandarin oil (see Tangerine oil, Italian).		
Mandelic acid, dms., 1,000 kilo lots. .... kilo	8.00	10.00
Manganese acetate, dihydrate, dms., divd .... lb.	.43½	[illegible]
tetrahydrate, dms., t.l., divd .... lb.	.48	[illegible]
Manganese borate printing ink drier. lb.	1.[illegible]	[illegible]
Manganese borate, tech., dms. ... lb.	.80	–
Manganese carbonate, chemical grade, 46% Mn. bgs., 20,000-lb. lots or more, works. ... lb.	1.05	–
Manganese chloride, anhyd., dms., 20,000-lb. lots or more. ... lb.	1.61	–
Manganese dioxide, nat., African, grd., 74%-76% MnO_2, 100-lb. bgs., t.l., works. .... ton	200.00	280.00
84% MnO_2, same basis. ..... ton.	250.00	–
Manganese dioxide, syn., cryst., battery grade, 90%-92% MnO_2, 100-lb. bgs., c.l., works. .. lb.	.70	[illegible]
chemical, ferrite grade, same basis. .... lb.	.48	[illegible]
Manganese gluconate, FCC grade, 100-lb dms., f.o.b. works. . lb.	3.[illegible]	[illegible]
Manganese hydrate dms., divd. ... lb.	[illegible]	–
Manganese hypophosphite, NF, dms. .... lb.	2.75	–
Manganese metal, electrolytic, No. 1 chip, bulk, c.l., works. ..... lb.	.[illegible]	–
dms., c.l., works .... lb.	[illegible]	–
Manganese naphthenate, liq., 6% Mn, dms., divd .... lb.	.67	–
Manganese resinate, fused, 3½% Mn. dms., frt. alld .... lb.	.34¼	–
precip. 6½-7% Mn. dms. .... lb.	.42	–
Manganese sulfate, fertilizer grade, run-of-pile, 75%-78% $MnSO_4$, 25 kilo bgs., 50-ton cars, divd. E. of Miss. .... ton	280.00	–
bulk, hopper cars, same basis .. ton	245.00	–
Manganese sulfate, 28% Mn, gran., bgs., c.l., t.l., works ...... ton	330.00	–
Manganese tallate, liq., 6% Mn, dms., frt. alld .... lb.	.80	–
Mannitol, coml., powd., dms., t.l., works .... lb.	3.02	–
Marjoram, French .... lb.	.86	.87
Egyptian .... lb.	.50	.78
MBT (see 2-Mercaptobenzothiazole).		
MBTS (see Mercaptobenzothiazyl disulfide).		
MDI (see Diphenylmethane 4,4,-di-isocyanate)		
Melamine, bgs., c.l., t.l., 40,000-lb. min., f.o.b. works .... lb.	.51½	.59½
bulk, c.l., t.l., same basis .... lb.	.50	.58
Melamine-formaldehyde resin, g.p., t.l. frt. alld .... lb.	.55	.60
molding compounds, same basis .... lb.	.46½	–
Menhaden oil, crude, tanks, works Atlantic Coast .... lb.	.14	.15
Gulf ports, same basis .... lb.	.14	.15
Menthol, nat., USP, Brazilian large and regular crystals, spot, cs., bulk .... lb.	8.75	7.50
syn., USP, racemic, 100-450 lbs. lb.	9.00	–
2-Mercaptobenzothiazole, bgs., t.l., works, frt. alld .... lb.	1.25	1.55
Mercaptobenzothiazyl disulfide t.l., dms., works, frt. alld ..... lb.	1.33	1.88
Mercuric chloride NF, gran., powd., 100-lb. dms., f.o.b. works .. lb.	8.50	–
Mercuric oxide, red, purif., 100-lb. dms., f.o.b. works .... lb.	7.00	7.25
tech., 100-lb. dms., same basis .... lb.	5.50	7.00
yellow, NF, 100-lb. dms., same basis .... lb.	7.00	7.25
tech., 100-lb. dms., same basis .... lb.	5.50	7.50
Mercurous chloride (see Calomel).		
Mercury, ammoniated (see White precipitate USP XV).		
Mesityl oxide, tanks, divd .... lb.	.48	–
Methacrylic acid, glacial, 99%, dms., t.l., frt. equald. .... lb.	.87	–
tanks, works, frt equald ...... lb.	78	–
d-Methamphetamine hydrochloride, dms. .... lb.	12.00	16.00
dl-Methamphetamine hydrochloride, dms. .... lb.	4.50	7.00
Methanol, syn., tanks, 4,000 gals., f.o.b. producing point, Gulf Coast. .... gal.	.52	.71½
Methenamine (see Hexamethylenetetramine).		
Methionine hydroxyanalogue, dry, 86% activity t.l., frt. alld ... lb.	.86	–
liquid, 88% activity, t.l. frt. alld. .... lb.	.88	–
dl-Methionine (see Racemethionine)		
Methoxychlor, 50% wettable powder, dealers, dms .... lb.	2.05	–
Methyl abietate, non-ret. dms., c.l., divd. E. .... lb.	8.40	–
Methyl abietate, hydrogenated, non-ret. dms., l.c.l., same basis. .... lb.	10.00	–
Methyl acetoacetate, East, divd. bulk .... lb.	.85	–
Methyl acrylate, tanks, divd .... lb.	68.50	–
Methyl alcohol (see Methanol)		
Methyl amyl alcohol, tanks, divd ... lb.	.55	–
Methyl n-amyl ketone, tks., divd .... lb.	.54½	–
Methyl anthranilate, tech., dms., f.o.b. .... lb.	1.41	2.85
Methyl benzoate, dms., t.l. .... lb.	.25	–
99.9%, perf. grade, dms., t.l. ..... lb.	1.65	–
Methyl bromide, dist., tanks, 140,000 lbs. min., frt. alld .... lb.	.56¼	–
Methylcellulose, premium, USP (visc. 400 through 4,000 cps) 50 lb. bags, t.l., cl., 30,000 lb., min., divd., zone 1 .... lb.	2.73	–
Methylcellulose, premium USP (visc. 15 cps) 50 lb. bags, t.l., cl., 30,000 lbs., divd., zone 1. . lb.	2.85	–
Methylcellulose, (visc. 400 through 4,000 cps) 50 lb. bgs., t.l., cl., 30,000 lbs., divd., zone 1. . lb.	2.24	–
Methylcellulose (visc. 15 to 25 cps) 50 lb bags, t.l., cl., 30,000 lb. min., divd., zone 1 .... lb.	2.52	–
Methyl chloride, indust. bulk, tanks, f.o.b. works .... lb.	.26	–
Methyl chloroform (see 1,1,1-Trichloroethane).		
Methyl cinnamate, dms. .... lb.	4.65	–
Methyl p-cresol, dms. .... lb.	6.00	–
Methyl ethyl ketone, tanks, divd, E.. lb.	.235	–
Methyl eugenol, 25-lb. cns. .... lb.	3.55	3.90
Methyl formate, pure, non-ret. dms., works .... lb.	.41	–
tanks, same basis .... lb.	.29	–
tech., tanks, works .... lb.	.31	–
Methyl heptenol, syn., 55-gal. dms. lb.	14.50	–
Methyl heptenone, pure, dms. .... lb.	7.30	–
Methyl heptin carbonate, dms. .... lb.	45.00	–
Methyl p-hydroxybenzoate (see Methylparaben)		
Methyl ionone, std., dms. .... lb.	7.30	9.40
Methyl isoamyl ketone, tanks, divd. E. .... lb.	.51	–
Methyl isobutyl carbinol (see Methyl amyl alcohol).		
Methyl isobutyl ketone, tanks, divd. lb.	.35	
divd. zone 2 (Calif.) .... lb.	.38	
divd. zone 3 (W. of Rockies, excluding Calif.) .... lb.	.41	–
Methyl isoeugenol, 25-lb. cns. .... lb.	8.60	10.40
Methyl methacrylate, tanks, divd ... lb.	.62	–
Methyl naphthyl ketone, cryst., dms. .... lb.	14.00	–
Methylparaben, USP, 500 kilograms, f.o.b.		
tech., 500 kilograms, f.o.b. .... kilo	10.14	–
Methyl parathion, tech., 80%, dms., frt. alld. E .... kilo	8.70	–
	1.66	–
Methyl phenylacetate, dms. .... lb.	8.80	5.40
N-Methyl 2-pyrrolidone, tanks, f.o.b. plant		
dms., c.l., t.l., same basis .. lb.	1.26	–
Methyl rosaniline chloride, USP, 1-lb. cans .... lb.	1.34	–
Methyl salicylate, NF, 1000-lb. dms., t.l., frt. alld. .... lb.	5.60	–
	1.79	1.94
Methyl violet (see Methyl rosaniline chloride).		
Methyl violet toner, molybdated, PMA, bbls., divd. E. of Rockies. . lb.	3.25	–
Methyl violet toner, tungstated, PTA, bbls., same basis. .... lb.	4.70	5.20
4,4,-Methylene dianiline (p,p-diaminodiphenyl methane) crude, dms., t.l., f.o.b. .... lb.	1.75	–
purif., flake, same basis .... lb.	2.26	–
Methylene di-p-phenylene di-isocyanate (see diphenylmethane 4,4,-di-isocyanate).		
Methylene chloride, tanks, 4,000 gal.-min., consumers, divd .... lb.	.35	–
Methylpentanediol (see Hexylene glycol).		
Methylphenylpryazolone (see 1- Phenyl-3-methyl-pyrazolone-5).		
a-Methylstyrene, f.o.b. shipping pt.. lb.	.44	–
p-Methylnaphthalene, bulk, works gal.	1.38	–
Methylthionine chloride (see Methylene blue).		
Mica, dry-grd., joint cement, plastic, 50 lb., bgs., c.l., works ...... lb.	.07½	–
dry-grd., roofing, 20 to 80 mesh. works. .... lb.	.07	–
paint or lacq., wet-grd., 325-mesh, bgs., c.l., f.o.b. works. .... lb.	.18¾	–
rubber, bgs., c.l., f.o.b. works .... lb.	.16¾	–
wallpaper, bgs., c.l., f.o.b. works. lb.	.22	–
Microcrystalline wax, petroleum, coating grades, FDA, tanks, works. .... lb.	.36½	.48½
laminating grades, FDA, tanks, works. .... lb.	.38½	.48
Mineral oil, white, 50-65 vis., USP light tanks, refy. .... gal.	2.38	–
65-75 vis., tanks, refy. ...... gal.	2.42	–
80-90 vis., tanks, refy. ...... gal.	2.45	–
145-155 vis., tanks, refy. .... gal.	2.53	–
USP 180-190 vis., tanks, refy. ... gal.	2.54	–
200-210 vis., tanks, refy. .... gal.	2.56	–
340-360 vis., tanks, refy. .... gal.	2.85	–
Mineral spirits, petroleum, odorless, tanks, New Jersey ..... gal.	1.83	1.88
Houston, Tex. .... gal.	1.78	1.79
Mineral spirits, petroleum, regular, tanks, New Jersey ...... gal.	1.41	1.48
Houston, Tex. .... gal.	1.41	1.43
Molybdate orange, bbls. .... lb.	1.52	1.95
Molybdenum metal, com.l., powd., 99.8%, dms., works. ..... lb.	13.50	–
Molybdenum trioxide, CP, dms., works, 24,000 lbs or more. lb.	5.25	–
tech., chemical, dms., 24,000 lbs. or more, basis. .... lb.	2.85	2.85
tech metallurgical, dms same basis. lb.	2.65	2.85
Molybdic acid (See Ammonium Dimolybdate)		
Monoammonium phosphate, fert. grade, min. 13% N. 52% P. bulk, c.l., f.o.b. Fla. works. .... ton	155.00	–
Monoammonium phosphate, tech., bgs., c.l., t.l., works, frt. equald. .... 100 lbs.	54.00	–
food grade, bgs., c.l., t.l., same basis. .... 100 lbs.	59.25	–
Mono-tert-butyl-m-cresol, bulk, t.l. . lb.	1.58	–
Monobutylamine, bulk, divd ...... lb.	.95	1.00
Monochloroacetic acid, purif. (see Chloroacetic acid, mono).		
Monochlorobenzene, tanks, f.o.b. . lb.	.42½	–
Monoethanolamine, tanks, frt. alld. E. .... lb.	.43	.46
Monoethylamine, 70% aqueous tanks, frt. prepaid, 100% basis. . lb.	.94	–
anhyd., tanks, same basis ..... lb.	.82	–
Monoisopropanolamine, dms., c.l., frt. alld. E. .... lb.	.78	–
tanks, same basis. .... lb.	.55	–
Monoisopropylamine, anhyd., dms., c.l., frt. prepaid. .... lb.	.79	–
tanks, same basis. .... lb.	.78	–
Monomethylamine, anhyd., tanks, contained basis frt. equald. ... lb.	.54½	–
25% soln., tanks, frt. alld. 100% basis. .... lb.	.57	–
40-60% soln., tanks, frt. equald. 100% basis. .... lb.	.63½	–
Monopotassium glutamate, dms., 990 lb. or more, frt. alld. .... lb.	2.50	–
Monosodium glutamate, 50-lb. bgs. c.l., t.l., divd. .... lb.	.78	.80
100-lb. drums, c.l., t.l., divd .... lb.	.85	–
Monosodium phosphate (see Sodium phosphate, monobasic).		
Montan wax, crude, Imp., German . lb.	.55	.57
dom., Calif., bgs., c.l., t.l., f.o.b. shipt. pt. .... lb.	.91	–
refd., dom. Calif., same basis .... lb.		
Morphine alkaloid, NF, 25 k lots .. kilo	1018.00	–
Morphine sulfate, USP, 25 k lots .. kilo	850.00	–
Morpholine, dms., c.l., frt. alld. E. .. lb.	1.02	–
tanks, frt. alld., E. .... lb.	.94	–
Muriatic acid (see Hydrochloric acid).		
Musk, syn., ambrette, 25-lb. cns. .. lb.	8.00	7.00
Musk, syn., ketone, dms. .... lb.	10.75	–
Musk, syn., xylol, dms. .... lb.	8.60	–
Mustard oil, syn. (see Allyl isothiocyanate).		
Mustard seed, Brown No. 1 ...... lb.	.24	–
Canadian No. 1 Yellow .... lb.	.25	–
Oriental No. 1 bgs. .... lb.	.25	–
Myrcia oil (see Bay oil).		
Myristic acid, coml., pure, t.l., bgs. . lb.	1.30	–
tanks. .... lb.	1.12	–
Myristica oil (see Nutmeg oil).		
Myrrh gum, bgs. .... lb.	2.25	–

N

Naphtha, high solvency (see Solvent naphtha, petroleum).		
Naphtha, petroleum, cleaners (see Cleaner's naphtha).		
Naphtha, VM&P, petroleum, tanks, New Jersey and New York .... gal.	1.29	1.34
Houston, Tex. .... gal.	1.20	–
Naphthalene, crude, dom., 78°, tanks, works. .... lb.	.22	–
Naphthalene, phthalic anhydride grade, tanks, works. ..... lb.	.23½	–
Naphthalene, petroleum, 80°C., f.o.b. .... lb.	.30	.32½
Naphthalene, refd., balls, flakes, whole sales, jobbers, dms., works. .... lb.	.65	.77
Naphthenic acid, crude, bulk, works lb.	.15	.32
refined, 220 acid, same basis .. lb.	.75	1.00
a-Naphthol, ground, dms., t.l. divd .. lb.	1.81	
b-Naphthol, tech. flake, 50-lb. bgs., c.l., works. .... lb.	1.10	
Naphthol arylide red toner deep shades, bbls. .... lb.	9.50	–
light shades, bbls. .... lb.	7.75	–
2-Naphthol-3,6-disulfonic acid, disodium salt (see R salt).		
1-Naphthol-5-sulfonic acid (see L- acid).		
1-Naphthol-5-sulfonic 8-amino acid (see S acid).		
Naphthylamine sulfonic mixed acid (see Cleve's acid).		
a-Naphthylamine, tanks, f.o.b. works. .... lb.	2.10	–
1-Naphthylamine-5-sulfonic acid (see Laurent's acid).		
2-Naphthylamine-4,8 disulfonic acid (see Cassella acid).		
2-Naphthylamine-1-sulfonic acid (see Tobias acid).		
Neatsfoot oil, 20°F, t.l., f.o.b. works dms. .... lb.	.52	–
tanks, f.o.b. works .... lb.	.47	–
30°F, t.l., f.o.b. works .... lb.	.52	–
tanks, f.o.b. works .... lb.	.44	–
40°F, dms., t.l., f.o.b. works .... lb.	.48	.49
tanks, f.o.b. works .... lb.	.39	–
Delivered prices apply on shipments within 300-mile radius of Philadelphia, Pa.; other areas, 1¼c. higher; Texas, 2c. higher and West Coast 3c. higher.		
Neomycin sulfate, USP, non-sterile, dms., 50-kilo. lots, activity basis, divd. .... kilo.	75.00	–
Neopentyl glycol, slurry, 80%., c.l., t.l., divd .... lb.	.522	–
powder, flake, bgs. t.l., divd. .. lb.	.598	
Nerol, tech., dms. .... lb.	5.30	5.75
perf. grade, dms. .... lb.	4.50	5.00
Neroli oil, NF French Bigarade, bots. .... kilo	1560.00	1650.00
Tunisian, bots. .... kilo	1150.00	–
Nerolidol syn. 55-gal. dms. .... lb.	7.05	–
Nerolin, Bromelin .... kilo	7.22	–
Niacinamide, USP, t.l. dms. ...... kilo.	8.00	–
Niacin NF, dms., 5,000 kilos or more, divd. .... kilo	7.50	–
feed-grade, 98-98.5%, bgs., same basis. .... kilo.	5.10	5.50
Nickel acetate, dms., 5,000-lbs. to t.l., divd. E. .... lb.	1.82	–
Nickel carbonate, dms., bgs., 5,000-lbs. to t.l., divd. E. .... lb.	3.45	–
Nickel chloride, bgs., 10,000-lbs. to t.l., divd. E. .... lb.	1.19	–
Nickel fluoborate, liq. conc., dms., t.l., divd. E. .... lb.	1.25	–
Nickel metal, electro cathodes, cs., works. .... lb.	3.45	–
Nickel nitrate, dms., bgs., t.l., divd E. .... lb.	1.18	–
Nickel oxide, 75%-78% Ni, dms., 500-lb. lots, f.o.b. works ...... lb.	2.60	–
Nickel sulfate, bgs., t.l., divd. E. ... lb.	.80	.90
Nicotinic acid (see Niacin).		
Nicotinamide (see Niacinamide).		
Nitric acid, 36° Be., 38°Be, 40°Be, 42°Be. tanks, c.l., works NF, 100% basis .... ton	185.00	–
84½% to 98% HNO_3, tanks, works, 100% basis .... ton	280.00	–
o-Nitroaniline, flake, dms., t.l. works. .... lb.	1.51	–
molten, refd., tanks, works ..... lb.	1.44	–
molten, tech., works .... lb.	1.37	–
o-Nitroaniline, orange toner, bgs., frt. alld. .... lb.	1.90	–
p-Nitroaniline, dms., c.l., t.l., 30,000 lb. min., works .... lb.	1.83	–
o-Nitroanisole, 100-kilo lots. ..... kilo	8.75	–
Nitrobenzene, tanks, f.o.b. .... lb.	.33	.34
o-Nitrochlorobenzene, dms., t.l., c.l., f.o.b. .... lb.	.82	–
tanks, same basis .... lb.	.74	–
2-Nitro-p-cresol, tech., dms., t.l., frt. alld. .... lb.	1.75	–
Nitroethane, tanks, divd, E. ...... lb.	2.50	–
Nitrogen solutions, direct application, over 32% N, and mgf. type, works. .... unit-ton.	1.20	–
direct application, 19-32% N. .... unit-ton.	1.26	1.48
Nitrogenous sewage sludge, processed, bulk, f.o.b. Chicago. .... unit ton.	4.10	–
NOTE: Price is per unit NH_3 plus $1, per unit e.p.s. bulk, f.o.b. producer,s works, Chicago.		
Nitrogenous tankage, processed, bulk, per unit-ton NH_3, f.o.b. Carrollville, Wisc. .... unit ton	7.00	–
f.o.b. Forbes, Me. ...... unit ton	6.75	–
expanded, bulk, c.l., per unit-ton N, f.o.b. Forrestdale, R.I. unit ton	8.35	–
Nitromethane, dms., t.l., divd. E. ... lb.	2.37	–
o-Nitrophenol, dms., f.o.b. works.. lb.	1.00	–
p-Nitrophenol, dms., c.l., f.o.b. works. .... lb.	1.05	1.45
2-Nitropropane, tanks, frt. alld. E. .. lb.	.55	–
m-Nitrotoluene, tech., dms., frt. alld. lb.	1.15	–
o-Nitrotoluene, dms., c.l., f.o.b. .... lb.	.65	–
tanks, same basis .... lb.	.48	.57
p-Nitrotoluene, tech. dms., c.l., works. .... lb.	.83	.85
tanks, works. .... lb.	.70	–
Nonylphenol, tanks, f.o.b. E. of Rockies, min. frt. alld. .... lb.	.49	.53½
Norephedrine hydrochloride (see Phenylpropanolamine hydrochloride)		
Nutmeg oil, dist., East Indian, NF, dms. .... kilo	26.00	27.50
Nutmegs, East Indian, whole ...... lb.	2.15	2.25

O

Ochre (see Iron oxide, yellow, nat.)		
Ocotea cymbarum oil dms. .... lb.	2.25	2.30
1-Octadecanol, syn., tanks, f.o.b. .. lb.	.43½	–
1-Octanol, syn., tanks, f.o.b. ...... lb.	.70	–
n-Octane, 97% min., tanks, f.o.b. Houston, Tex. .... gal.	6.25	–
Octyl alcohol, perfumer's grade, bots., cns. .... lb.	1.40	1.75
n-Octyl, n-decyl phthalate, tanks, divd. .... lb.	.33½	.37
tert-Octylamine, dms., c.l., t.l., works.	2.60	
Octylphenol, molten, f.o.b. works. .... lb.	.75	.75½
Oiticica oil, liq. dms. .... lb.	.40	–
tanks .... lb.	.82	–
Oleic acid, dbl.-dist., (white), dms. . lb.	.46	.59
tanks. .... lb.	.38	.44
Oleic acid, s.d. (red) dms. ...... lb.	.43	.49
tanks .... lb.	.35	.41

CHEMICAL PRICES

WEEK ENDING AUGUST 8, 1986

Oleum (see Sulfuric acid, fuming).		
Olibanum gum, tears, bgs. .... lb.	2.10	–
Olive oil, edible, Spanish, dms. ... gal.	8.50	–
Italian B-type .... gal.	5.75	–
Olivine, crude, works .... ton	12.00	–
20 mesh. works .... ton	15.00	–
100 mesh. works .... ton	20.00	–
Opium. USP. gran. powd. 25-kilo lots. .... kilo	125.00	–
Orange oil, expressed. USP. Calif., dms., f.o.b. plant .... lb.	1.20	–
expressed Valencia, dms. .... lb.	1.00	1.20
Calif., dist., cns. f.o.b. plant ..... lb.	.40	–
Florida, dms. .... lb.	.50	.55
Brazilian .... kilo	1.20	–
West Indian, bitter, NF X, cns., dms. .... lb.	8.50	–
Orange peel, bitter, Haitian bls. .... lb.	.38	–
Oregano. Greece, 30M .... lb.	1.10	1.20
Turkey .... lb.	1.00	1.05
Mexico .... lb.	1.05	–
Origanum oil, Spanish, cns. ...... kilo	35.00	–
Orris root, Florentine, bls. .... lb.	4.00	–
powd., bbls., bxs. .... lb.	4.80	5.00
Verona bls. .... lb.	3.00	–
powd., bbls., bxs. .... lb.	4.80	5.00
Ouricury wax, refd., pure, bgs. .... lb.	3.25	3.35
Oxalic acid, bgs., c.l., works ...... lb.	.44	–
b-Oxynaphthoic acid dms. works, tech. .... lb.	2.55	–
Oxyquinoline base, pure, 1,000 lbs., frt. alld. .... lb	8.00	–
Oxyquinoline sulfate, 100 lbs. frt alld. .... lb.	4.00	–

P

Palladium metal, works, ... Troy-oz.	126.00	–
Palm oil, (see Oils, Fats & Waxes Market Report)		
Palm oil acid, dbl-dist. dms. ...... lb.	.31½	–
tanks. .... lb.	.30	–
s.d., dms. .... lb.	.42	.45
tanks. .... lb.	.35	–
Palm kernel oil, bulk, c.i.f., U.S. ports .... lb.	.11	.14
Palmarosa oil, Indian dms. ...... kilo	38.00	–
Palmitic acid, 90%, tech., bags. ... lb.	.53	–
tanks .... lb.	.51	–
Papaverine hydrochloride, NF powd., imp. bulk .... kilo	55.00	–
Paprika, Hungarian, 100 AU bgs. .. lb.	.80	–
Spanish, 110 AU bgs. .... lb.	.90	–
Paraffin, fully-refd., 127-130F., ASTM, tanks, refy	.28	.36
130-135 F., ASTM, tanks, refy.	.33½	.39
140-145 F., ASTM, tanks, refy.	.35	.41½
150-155 F., ASTM, tanks, refy.	.41½	.46
slack wax, 6% oil, tanks refy	.18	–
12% oil, tanks refy	.21	–
20% oil, tanks refy	.15	–
AMP temperatures are an arbitrary 3F higher than ASTP.		
Paraformaldehyde, 91%, flake, bgs. c.l., t.l., divd. .... lb.	.29½	–
95%, powd., bgs., c.l., t.l. divd. lb.	.39½	–
Paraldehyde, tech., 98%, 55-gal. dms., t.l., divd. E. .... lb.	.76½	–
tanks, divd. E. .... lb.	.68½	–
Parathion, ethyl, dms., frt. alld. .... lb.	1.75	–
Parathion methyl (see Methyl parathion).		
Para toner red, bbls. .... lb.	3.75	–
chlorinated, (red 4) kgs. ...... lb.	8.75	–
Patchouli oil, Indonesian., dms. ... kilo	20.00	22.00
Peach kernel oil, USP (see Apricot kernel oil).		
Peanut meal (see Oils, Fats & Waxes market report).		
Peanut oil (see Oils, Fats & Waxes market report).		
Pectin dom., NF, citrus, powd., 100-kilo lots divd. .... lb.	8.30	3.70
Pelargonic acid, nat., tanks, min. frt. alld. .... lb.	.70	–
syn., tanks, f.o.b. frt. alld. .. lb.	.70	–
Penicillin, potassium, non-sterile, 200-billion-unit lots, .. billion units	20.00	25.00
Penicillin, procaine, sterile 50- billion-unit lots, bulk .... billion units.	36.00	–
Pennyroyal oil, dms. .... lb.	5.90	–
Pentachlorophenol, 50-lb. bgs., t.l., f.o.b. Wichita, Kan. .... lb.	.55	–
Pentaerythritol, tech., bgs., c.l., f.o.b., frt. alld. .... lb.	.71	.72
Pentaerythritol, di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).		
Pentaerythritol triacrylate, t.l. dms., f.o.b. works. .... lb.	1.60	–
Pentobarbital, dms., 100 lbs. or more, frt. alld. .... lb.	7.00	–
Pentobarbital-sodium, dms., 100 lbs. or more, divd. .... lb.	14.00	–
Pentylene tetrazol, NF, dms., 200-kilo lots. .... kilo	32.00	–
Pepper, black, Brazilian, bgs. ...... lb.	1.86	1.90
Lampong, bgs. .... lb.	1.94	–
Malabar, bgs. .... lb.	1.90	–
Tellicherry, bgs. .... lb.	2.10	–
Pepper, red Chinese Fukien rice bgs lb.	.85	–
Hainan, bgs. .... lb.	1.00	–
Liling, bgs. .... lb.	.76	–
Indian, S-4, bgs. .... lb.	.88	–
Pakistan, dundicuts, bgs. ...... lb.	.43	–
Pepper, white, Muntok, bgs. ...... lb.	2.30	2.35
Peppermint leaves, imp., dms. .... lb.	2.85	–
Peppermint oil, Madras. .... lb.	14.00	–
Midwest .... lb.	18.00	–
Willamette .... lb.	11.00	–
Yakima. .... lb.	8.00	–
syn., dms., f.o.b. works .... lb.	7.00	9.00

CHEMICAL PRICES

WEEK ENDING AUGUST 8, 1986

Perchloroethylene, dry cleaning grade, distr., tanks, divd. ....lb.	.28½	–
Indust., grade, consumers, tanks, divd. ....lb.	.31	–
Peri acid. dms. ....lb.	2.55	–
Permanent red 2B, (red 48), calcium salts, dms., frt. alld. ....lb.	5.25	–
barium salts, same basis ....lb.	5.25	–
Peru balsam, f.o.b. ....lb.	3.25	–
Petitgrain oil, Paraguay ....lb.	5.75	6.25
Petrolatum, USP, snow white, dms., c.l., refy ....lb.	.375	–
tanks, refy ....lb.	.310	–
USP, soft white, dms., c.l., refy. ....lb.	.375	–
tanks, refy ....lb.	.310	–
USP, lily white, dms., c.l., refy ....lb.	.370	–
Petrolatum, USP, Lilly white, tanks, refy ....lb.	.305	–
USP, cream, dms., c.l., refy ....lb.	.365	–
tanks, refy ....lb.	.30	–
USP, soft yellow, dms., c.l., refy ....lb.	.350	–
tanks, refy ....lb.	.285	–
USP, amber, dms., c.l., refy ....lb.	.345	–
tanks, refy ....lb.	.280	–
Petroleum pitch (see Asphalt, petroleum).		
Petroleum sulfonate, 80-82%, sulfonic cont., HMW, bulk, works ....lb.	.48¼	.49
MMW, same basis ....lb.	.48	–
LMW, same basis ....lb.	.48	.49¼
Prices for 51% sulfonic content 2c per lb. lower on corresponding molecular wts.		
Phenacetin USP, powd., 200-lb. dms., 1,000-lb. lots, divd. ....lb.	2.20	–
100-lb. dms., 1,000-lb. lots, divd. ....lb.	2.22	2.45
p-Phenetidine, dms., c.l., f.o.b. ....lb.	2.00	–
Phenobarbital, USP, dms., 500-kilo lots., f.o.b. works ....kilo	19.50	–
Phenobarbital-sodium, NF, 500-kilo lots, f.o.b. works ....kilo	27.00	–
Phenol, syn. tanks, frt. equald. ....lb.	.25	.29
p-Phenolsulfonic acid, 85% sol'n., dms., c.l., fob works ....lb.	.64	–
tanks, same basis ....lb.	.58	–
Phenothiazine, indust. grade, 50-lb. bags, c.l., f.o.b. works ....lb.	2.33	–
purif. grade, same basis ....lb.	2.69	–
Phenyl acetate, dms., 100-lb. lots, works ....lb.	1.04	–
Phenylacetic acid, pure cryst., 25-lb. cns. ....lb.	4.50	–
dl-Phenylalanine, dms., 25-kilo lots ....kilo.	84.00	–
1-Phenyl-3-carbethoxy pyrazolone-5, dms. 200-lb. lots, divd. E. ....lb.	3.48	–
m-Phenylenediamine, cast, dms., c.l., t.l., f.o.b. works ....lb.	2.07	–
o-Phenylenediamine, flaked, dms., t.l., f.o.b. works ....lb.	3.25	–
p-Phenylenediamine, flaked, dms., f.o.b. works ....lb.	4.00	–
Phenylephrine hydrochloride, USP 100-kilo lots or more ....kilo.	175.00	185.00
Phenylethyl acetate, dms ....lb.	3.35	–
2-Phenylethyl alcohol, NF, dms. ....lb.	2.55	3.40
b-Phenylethylamine, dms., 30,000 lbs. or more, frt. alld. ....lb.	1.50	–
Phenylethylphenyl acetate, 25-lb. cns. ....lb.	5.50	6.90
Phenylglyconic acid (see Mandelic acid).		
Phenylhydrazine, 99% min., dms. ....lb.	3.50	–
1-Phenyl-3-methyl-5-pyrazolone, dms., 250-lb. lots divd. E. ....lb.	1.80	–
o-Phenylphenol, dms., t.l., works ....lb.	1.35	2.00
p-Phenylphenol, bgs., t.l., 40,000 lbs. or more, works ....lb.	1.85	–
Phenylpropanolamine hydrochloride, 100-kilo dm. ....kilo	24.00	28.00
Phenylsalicylate, purif. cryst., dms., E. ....lb.	2.75	–
tech., cryst., E. ....lb.	2.25	–
flake, E. ....lb.	2.35	–
Phloxine toner (red 80), dms., frt. alld. ....lb.	1.95	2.05
Phosgene, 1-ton ret. cyls., 5 to 9-cyl. quantities, works ....lb.	.55	.67
Phosphate rock, Fla., land pebble, run of mine washed, 66-68% b.p.l. bulk c.l. mines ....ton	23.15	–
vessel, Tampa, same basis ....ton	28.00	–
Phosphoric acid, com'l. and tech. grades, 75% tanks, works ....100 lbs.	29.00	–
80% tanks, works ....100 lbs.	31.00	–
85% N.F. tanks, f.o.b. freight equald. ....100 lbs.	33.50	–
Food grade prices $2.00 above tech. grade.		
Phosphoric acid, agricultural grade, 52-54% s.p.a., tanks, works ....unit-ton	3.10	–
super, min. 70% s.p.a., same basis ....unit-ton.	3.45	–
Phosphorus, white (yellow) solid dms., c.l., works, frt. equald. ....lb.	1.00	–
tanks, works, f.o.b. works ....lb.	.81	–
Phosphorus oxychloride, tanks, frt. equald. ....lb.	.40	–
Phosphorus pentasulfide, powd., dms., c.l., works ....100 lbs.	50.00	–
toto bins, sellers ....100 lbs.	45.00	–
Phosphorus pentoxide, dms., f.l., works ....lb.	.82	–
Phosphorus sesquisulfide, dms., cvs., c.l., works ....lb.	.38	–
Phosphorus trichloride, dms., c.l., works ....lb.	.40	–
tanks, works ....lb.	.35	–
Phthalic anhydride, flake, c.l., f.l., dms., frt. equald. ....lb.	.30	.335
molten, tanks, same basis ....lb.	.27	.305
Prices 1-1½c. per lb. higher on the West Coast		
Phthalimide, flake, works ....lb.	.85	–
Phthalocyanine blue toner, red shade, bbls., frt. alld. E. of Rockies ....lb.	8.10	9.50
green shade, same basis ....lb.	8.40	8.50
resinated, bbls., same basis ....lb.	8.20	8.75
Phthalocyanine blue toner, water dispersable, bbls., same basis ....lb.	7.05	7.75
Phthalocyanine green toner, all grades, bbls., frt. alld. E. of Rockies ....lb.	8.10	10.10
Phthalocyanine green toner, resinated, bbls., same basis ....lb.	7.45	8.20
Phthalylsulfacetamide, dms., 500-kilo lots ....kilo.	8.81	–
Picolines, refd, mixed, bulk ....kilo	2.81	–
Picric acid, pure paste, 25-lb. ctns., c.l., dry basis, f.o.b. Charlotte, N.C. ....lb.	6.00	–
tech., paste, 25-lb. ctns., t.l., dry basis, f.o.b. Charlotte, N.C. ....lb.	5.00	–
Pigment green B, kgs. ....lb.	2.20	–
Pilocarpine hydrochloride, USP, dms. ....kilo.	1,600.00	2,000.00
Pimento see Allspice		
Pimento leaf oil, dms. ....lb.	14.50	–
Pine oil, 80% min. alcohol content, bulk, f.o.b. works ....100 lbs	47.00	53.00
dms., c.l., f.l., same basis ....100 lbs	51.00	54.00
a-Pinene, perfume grade ....kilo	1.82	–
tech. grade ....lb.	.18	.23
b-Pinene, perfumery grade. tanks ....kilo	2.30	–
tech. grade. tanks ....lb.	.35	.40
Piperazine, anhyd., dms., t.l., frt. alld. E. ....lb.	1.80	–
Piperazine citrate, 36%, dms., 1,100-lb. lots, frt. alld. ....lb.	2.25	2.35
Piperazine dihydrochloride, 63%, dms., t.l., frt. alld. ....lb.	2.00	–
Piperazine hexahydrate, 44%, dms., 1,100-lb. lots, frt. alld. ....lb.	1.60	–
Piperazine phosphate, 42%, dms., t.l., frt. alld. ....lb.	1.80	–
Piperidine dist. 98% min., dms., c.l., t.l., works ....kilo.	6.92	–
Piperonyl butoxide dms., divd. E. ....lb.	5.00	–
Platinum, metal, works ....Troy oz.	502.00	–
Polycarbonate resin, pellets, nat., f.l., frt. alld ....lb.	1.84	1.88
Polyester resin, unsaturated, g.p., orthophthalic, bulk, tankcars, frt. alld ....lb.	.51	.53
isophthalic, same basis ....lb.	.58	.62
Polyethylene resin, high-density, blow molding, g.p., hopper cars, frt. alld. ....lb.	.43	.49
injection molding, g.p., hopper cars, frt. alld. ....lb.	.43	.48
extrusion, g.p., hopper cars, same basis ....lb.	.47	.48
wire and cable, nat., hopper cars, same basis ....lb.	.45	.49
wire and cable, black, same basis ....lb.	.56½	.57
Polyethylene resin, low-density, film liner, hopper cars, frt alld ....lb.	.36	–
clarity film, hopper cars, frt., alld. ....lb.	.37	–
pallet shrink film, hopper cars, same basis ....lb.	.35	–
extrusion coating, hopper cars, same basis ....lb.	.38	.42
g.p., hopper cars, same basis ....lb.	.38	.42
Polyethylene linear low-density g.p. resin	.38	.40
blown film resin	.40	.43½
cast film resin	.40	.45
Polyethylene resin, low-density injection molding, g.p., hopper cars, same basis ....lb.	.45	.48
fine wire, CATV, power cable ....lb.	.847	–
wire and cable thermoplastic high-voltage, natural color, same basis ....lb.	.70	.74½
wire and cable, XLPE low voltage, 14% carbon black, same basis ....lb.	.67½	.72½
wire and cable jacketing, black ....lb.	.587	.667
Polymyxin sulfate, USP, bulk, 50-billion units min. ....million units	.52	–
Polyoxyethylene sorbitan monostearate, dms., 20,000-lb. lots, works ....lb.	.73	–
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb. lots, works ....lb.	.73	–
Polypropylene resin, homopolymer, g.p., nat., t.l., frt. alld. ....lb.	.45	.48
copolymer, med. impact, nat., same basis ....lb.	.50	.58
high impact, same basis ....lb.	.53	.60
Colored material 5c. per lb. higher for each grade.		
Polystyrene resin, cryst., nat., hopper cars, frt. alld. ....lb.	.48	–
impact, nat., hopper cars, same basis ....lb.	.51	–
high heat, high impact, nat., hopper cars, same basis ....lb.	.52	–
expandable beads (EPS), pkging grade, 1,000-lb. lots ....lb.	.69	–
modified, same basis ....lb.	.73	–
Polyvinyl alcohol, fully hydrolyzed, medium viscosity, bgs., t.l., divd. ....lb.	1.00	1.05
partially hydrolyzed, medium viscosity, bgs., t.l., divd. ....lb.	1.05	–
Polyvinyl chloride resin, g.p., homopolymer dispersion, bgs., t.l., divd. ....lb.	.50	–
g.p. suspension, bulk, same basis ....lb.	.36	–
pipe grade, bulk, same basis ....lb.	.47	–
film grade, bulk, same basis ....lb.	.37	.47
Polyvinyl chloride, g.p. copolymer dispersion, same basis ....lb.	.58	.61
g.p. copolymer suspension, same basis ....lb.	.45	.48
Poppyseed, Dutch, bgs. ....lb.	.40	–
Turkey, bgs. ....lb.	.38	–
Potash agricultural (see Potassium muriate).		
Potash, caustic, liq., 45% basis, tanks, works ....100 lbs.	13.00	–
West Coast, 50% basis, tanks, ex terminal ....100 lbs.	18.06	–
reg. flake, 88-92%, 400-lb. dms., c.l., works ....100 lbs.	42.35	–
Potassium acetate, NF, gran., dms., f.l. works E. ....lb.	.90	1.31
Potassium bicarbonate, tech., gran., bgs., c.l., works ....lb.	.31½	–
Potassium bicarbonate, USP, gran., dms., t.l. ....lb.	.72	–
Potassium bichromate, gran., 400-lb. dms., c.l., t.l., works ....lb.	.48	–
Potassium bifluoride, tech., dms., t.l., works, frt. equald. ....lb.	.45	.49
Potassium bitartrate, NF, gran., powd., bgs. ....lb	.00	1.20
Potassium borohydride, powd. dms., 100-1,000 lbs., works ....lb	18.00	20.00
Potassium bromate, gran., powd., 200-lb. dms., c.l., f.o.b. works ....lb	1.06	–
Potassium bromide, NF., gran., dms., c.l. f.o.b. works ....lb	1.12	–
Potassium carbonate, liq., 47% K_2CO_3, tanks, f.w., works ....100 lbs.	15.40	–
dms., c.l., t.l., works ....100 lbs	20.85	–
calcined, 99-100% K_2CO_3, hopper cars or trucks, works ....100 lbs.	32.50	–
bgs., c.l., t.l., works ....100 lbs.	38.40	–
Potassium carbonate, hydrated, 83-88% K_2CO_3, dms., c.l., t.l., works ....100 lbs.	34.90	–
bgs., c.l., t.l., works ....100 lbs.	33.70	–
Potassium carbonate, gran., purif., 400-lb. dms., 5-dm. lots ....lb.	.40	.48
Potassium chlorate, cryst., dms., c.l., works ....lb	.14½	–
powd., dms., c.l., works ....lb.	.30	–
purif., gran., 325-lb. dms., f.o.b. shipping point ....lb.	.40	–
Potassium chloride, chemical grade, 99.95% KCl, bulk, c.l., f.o.b works ....ton	105.00	–
USP cryst. dms. ....lb.	1.12	–
USP gran., dms. ....lb.	.87	–
USP powd., dms. ....lb.	.87	–
Potassium chloride, agricultural (see Potassium muriate).		
Potassium chromate, purif., cryst., dms., works ....lb.	.57	–
Potassium citrate, NF, gran., 200-lb. dms., frt. alld. ....lb.	.93½	–
Potassium cyanide, dms., 20,000-lb. lots or more, f.o.b. works ....lb.	1.32	–
Potassium dichromate (see Potassium bichromate).		
Potassium fluoborate, tech., dms., c.l., f.l., works, frt. equald. ....lb.	1.40	1.42
Potassium fluoride, anhyd., dms., f.l. ....lb.	1.68	–
Potassium gluconate, dms., f.l., f.o.b. works ....lb.	1.45	–
Price W. of Denver 4c. per lb. higher.		
Potassium guaiacolsulfonate, 300-lb. dms., 800 lbs. or more frt. equald. ....lb.	2.10	–
Potassium hydroxide, tech. (see Potash, caustic).		
Potassium hydroxide, USP, pellets, 100-lb. dms., c.l., f.l., works, frt. equald. ....lb.	1.29	1.31
Potassium iodide, USP, gran., cryst., dms., 1,000-lb. lots divd. ....lb.	10.72	12.39
ACS grade truckload ....lb.	11.32	13.55
Potassium-magnesium sulfate, std., bgs., works ....ton	59.00	–
basis 40% K_2SO_4 and 55% $MgSO_4$ bulk, works ....ton	87.00	–
Potassium metabisulfite, gran., dms. f.l. ....lb.	.44	–
Potassium muriate, 60-62.4% min. K_2O, std., bulk, c.l., frt. equald., f.o.b. Sask., Canada ....ton	44.00	45.00
soluble, fine std., f.o.b. Sask. ....ton	46.00	47.00
coarse, f.o.b. Sask. ....ton	49.00	50.00
gran., f.o.b. Sask. ....ton	50.50	51.50
Potassium nitrate, fert. grade, std., 50-ton c.l., divd. SE. ....ton	267.00	274.00
prilled ....ton	277.00	284.00
tech., gran., bgs., c.l., min. 50 tons, divd. ....ton	470.00	–
Potassium oxalate, neutral, tech., fine gran., powd., 300-lb. dm., frt. equald. ....lb.	2.64	–
Potassium pentaborate, gran., bgs., c.l., works ....lb.	1.01	–
dms., same basis ....lb.	1.06	–
Potassium pentaborate powder 15c. per lb. higher.		
Potassium perchlorate, dms. c.l., works ....lb.	.78	–
Potassium permanganate, free flowing, bulk, hopper trucks, works ....lb.	1.09	–
50-kg. dms., same basis ....lb.	1.20	–
150-kg. dms., same basis ....lb.	1.17	–
Potassium permanganate, USP, 50-lb. kgs., works, c.l., t.l. ....lb.	1.36	–
Potassium persulfate, 225-lb. dms., 24,000 lbs. or more, f.o.b. plant ....cwt.	78.80	–
c/tl same basis ....cwt.	72.80	–
Potassium pyrophosphate tetrabasic, bgs., c.l., f.l., works, E., frt. equald. ....100 lbs.	43.75	47.25
bulk, same basis ....100 lbs.	46.00	40.50
Potassium salicylate, USP, gran., 200-lb. dms., 2,000 lbs. or more, works. frt. alld. ....lb.	1.52	–
USP, powd., 300-lb. dms., 2,000 lbs. or more, same basis ....lb.	1.42	–
Potassium silicate, soln., 28.8-30.2 Be., 2.5 ratio, t.c., t.l., works ....100 lbs.	18.80	–
dms., c.l., t.l., works ....100 lbs.	25.90	–
Potassium silicate, 40-40.5 Be., 2.1 ratio, t.c., t.l., works ....100 lbs.	26.05	–
40-40.5 Be., 2.1 ratio, dms., c.l., t.l., works ....100 lbs.	32.05	–
Potassium silicate, electronics grade, 30-30.4 Be., 2.1-2.2 ratio, t.c., t.l., works ....100 lbs.	28.10	–
dms., c.l., t.l., works ....100 lbs.	33.10	–
solid or glass, 2.15 ratio, dms., c.l., t.l., works ....100 lbs.	53.30	–
solid or glass, 2.5 ratio, dms, c.l., t.l., works	45.65	–
"Ratio" indicates percentage by weight of SiO_2 divided by percentage by weight of K_2O.		
Potassium silicofluoride, bgs., c.l., t.l., frt. equald. ....lb.	.11½	.15
Potassium-sodium tartrate, NF, gran. or powd., dms. ....lb.	.80	1.20
Potassium sorbate, t.l. dms., divd. ....lb.	2.20	3.10.
Potassium stannate, dms., frt. ald. ....lb.	N.A.	–
Potassium sulfate, agricultural grade, [illegible] ....ton	150.00	180.00
[illegible]	.86	–
Potassium tetraborate, gran., bgs., c.l. works		
dms., same basis ....lb.	1.10	–
Potassium tetraborate powder 15c. per ton higher	1.15	–
Potassium thiocyanate, USP, cryst., 225-lb. dms., 5-dm. lots ....lb.	4.01	–
tech., cryst., dms., t.l. ....lb.	.62	–
Potassium titanate, ctns., c.l., works	.71½	–
Potassium-titanium fluoride, tech., dms., t.l. works, frt. equald. ....lb.	1.24	1.59
Potassium zirconium fluoride, tech., dms., t.l., works, frt. equald. ....lb.	.78	–
Prednisolone USP, dms., 5 kilos or more ....gram	1.09	–
Prednisolone acetate, USP, dms., 5 kilos or more ....gram	1.12	–
Prednisolone, [illegible], USP, dms., 5 kilos or more ....gram	1.12	–
Procaine hydrochloride, USP, antibiotic grade, dms., 2,000-lb. lots frt. alld ....lb.	4.95	5.75
Procainamide hydrochloride, USP, [illegible] grade, dms., 1,000-lb lots, frt. alld ....lb.	4.95	5.50
Propionaldehyde, tanks, f.o.b. ....lb.	.35½	–
Propionic acid, syn., puro, tanks, divd. E. ....lb.	.33	.34½
n-Propyl acetate, tanks, dvd ....lb.	.53½	–
n-Propyl alcohol, tanks, dvd ....lb.	.42	.44
n-Propyl gallate dms., 100 to 2,000-lb. lots, divd ....lb.	11.50	–
n-Propyl p hydroxybenzoate, USP, 500 kilos ....kilo	10.80	–
tech., 500 kilos, f.o.b. ....kilo	10.35	–
Propyl paraben (see n-Propyl p-hydroxybenzoate)		
Propyl thiouracil, dms., 50-kilo lots or more ....kilo	55.00	–
n-Propylamine, dms., c.l., divd	.75	.80
Propylene, polymer grade, f.o.b. Tex. and La Gulf Coast points ....lb.	.17¾	–
chemical grade same basis ....lb.	.15¾	.16
Propylene glycol, indust., tanks, f.o.b. ....lb.	.40	.41
USP, tanks, f.o.b. E ....lb.	.43	.44
Propylene glycol monomethyl ether, tanks, divd E ....lb.	.49	–
Propylene oxide, tanks, f.o.b. works, frt. equald ....lb.	.47½	–
Psyllium seed, USP powd bgs ....lb.	1.50	1.5
Pumice, dom., fine, 4F-0, bgs., ton lots ....ton	270.00	–
medium, 0½, 1½, bgs., ton lots ....ton	300.00	–
coarse, 2-extra coarse, bgs., ton lots ....ton	300.00	–
Pumice, imp., Italian, fines, bgs., ton lots f.o.b. East Coast ....ton	280.00	–
medium, bgs., ton lots f.o.b. East Coast ....ton	350.00	–
coarse, bgs., ton lots f.o.b. East Coast ....ton	300.00	–
Pyrazolone red (red 38), dms., works ....lb	5.25	5.35
Pyrethrum flowers, fine grd 0.9% pyrethrins, ton lots, frt. alld ....lb	1.91	–
Pyrethrum, purif., 20% pyrethrins, dms., works ....lb.	37.50	37.75
Pyridine, refd., 2 deg., c.l., works dms. ....kilo	5.90	–
tanks ....kilo	5.70	–
Pyridoxine hydrochloride, USP, 100 kilos or more, divd ....kilo	29.00	33.00
Pyrites, Canadian 48-50% S. fines ....long ton	4.50	5.00
Pyrogallic acid (see Pyrogallol)		
Pyrogallol, 100-lb. dms., 1,000 lb. lots, divd ....lb.	13.70	15.25

Q

Quebracho [illegible] ....lb.	.57	–
Quinacridone maroon, dms., frt. alld ....lb.	20.75	24.25
red, dms., frt. alld ....lb.	17.75	18.00
scarlet, dms., frt. alld ....lb.	21.75	24.25
violet, dms., frt. alld ....lb.	17.75	19.00
Quince seed, bgs. ....lb.	2.00	2.10
Quinidine sulfate, USP, 1,000-oz. dms., 2,000 oz. or more ....oz.	4.20	4.25
Quinine hydrochloride, NF, 1,000-oz. dms., 2,000 oz. or more ....oz.	2.46	2.50
Quinine sulfate, USP XVIII, 1,000 oz. dms., 2,000 oz. or more ....oz.	2.30	–
Quinoline, dms., t.l., frt. equald ....lb.	1.49	–
tanks, same basis ....lb.	1.43	–

R

R salt tech., 304 molecular wt. ....lb.	2.12	–
Racemethionine, USP, 50-250 kilos ....kilo	8.80	–
250-500 kilos ....kilo	8.60	–
500 or more kilos ....kilo	8.50	–
feed grade, 98% min., c.l., t.l. ....lb.	1.07	–
Rapeseed oil, dms. ....lb.	.58½	–
Rauwolfia serpentina root, powd. bbls., dms. ....lb.	22.00	–
Red carmine. No. 40 (see Carmine No. 40)		
Red precipitate. (see Mercuric oxide, red)	.40	–
Reserpine, USP, cryst., bots. ....gram		
Resorcinol tech., bgs., t.l. works divd. ....kilo	3.96	–
Resorcinol, USP, cryst., dms. 50 kilos or more, works ....kilo.	9.35	–
powd. dms., same basis ....kilo.	9.90	–
Resorcinol monoacetate, dms., 1,000 lbs. or more ....lb.	1.86	–
Rhodamine red toner, molybdated, PMA, dms., works ....lb.	8.25	–
tungstated, PTMA, dms., f.o.b. works ....lb.	11.50	–
Rhodinol, 25-lb. cns. ....lb.	106.00	–
syn., dms. ....lb.	15.25	–
Rhubarb root, India, whole, bgs. ....lb.	1.45	–
powd., bgs. ....lb.	1.81	–
Riboflavin, feed grade, 25 kilos	34.50	–
[illegible]		
Rice bran oil, refined dms. t.l. ....lb.	1.25	–
Ricinoleic acid (see Castor oil acids, split).		
Rochelle salt (see Potassium-sodium tartrate).		
Roofing pitch (see Coaltar pitch, roofing.)		
Rose oil, nat., NF, Bulgarian, otto. bots. ....kilo.	3850.00	3990.00
Turkish, otto., bots. ....kilo.	2250.00	3000.00
Rosemary oil, NF, Spanish, dms. ....kilo	8.00	14.50
Tunisian, dms. ....kilo	8.75	15.00
Rotenone resin, 30-45%, 100-lb. dms. works ....unit-lb.	.21	.23

S

Saccharin NF, gran., soluble, dms. 1,000-lb. lots, frt. alld. ....lb.	2.50	2.75
Saccharin NF, powd., soluble, dms., less than 20,000-lb. lots, frt. ald. ....lb.	3.75	–
Safflower oil, non-break. tanks, N.Y. ....lb.	.47	.50
edible dms., N.Y., divd. ....lb.	.93	.87
Sage leaves, Dalmatian, No. 1, bgs. ....lb.	1.76	–
Albanian, bgs. ....lb.	1.30	–
Israeli ....lb.	.80	–
Sage oil, Clary, French, bots. ....kilo	90.00	–
Dalmatian, cns. ....lb.	9.50	10.00
Spanish, cns. ....kilo	12.50	–
Salicylaldehyde, tanks, f.o.b. ....lb	3.80	–
Salicylamide, NF, gran., powd., dms., 2,000-lb. lots, one ship. ....lb.	1.07	1.10
Salicylic acid, tech., dms., c.l., t.l., works ....lb.	1.23	1.41
USP, cryst., dms., 1,000 lbs. or more ....lb.	1.33	1.63
USP, powd., dms., 1,000 lbs. or more ....lb.	1.88	–
Salol (see Phenylsalicylate).		
Salt, evaporated, common, 80-lb. bgs., c.l., t.l., North, works ....80 lbs.	4.02	–
bulk, same basis ....ton	80.00	61.20
chemical grade, same basis ....80 lbs.	4.30	–
Salt, rock, medium, coarse, same basis ....80 lbs.	2.70	–
bulk, same basis ....ton	18.00	25.00
Saltcake, dom., bulk, works, 100% Na_2SO_4 basis, f.o.b. works E ....ton	85.00	98.00
same basis W ....ton	90.00	99.00
Sandalwood oil, E. Indian ....kilo	145.00	–
Indonesia ....kilo	102.00	–
Sarcosine, tech., tanks, works, frt. equald. ....lb.	.50	–
Schaeffer's salt, paste, dms., 100% basis, works ....lb	2.59	–
Scopolamine hydrobromide, USP, 100-oz. lots bots. ....oz.	35.00	46.50
Sebacic acid, CP, bgs., c.l. works ....lb.	2.14	–
purif., bgs., c.l., works ....lb.	2.13	–
Seidlitz mixture, dms., 5,000-lb. lots ....lb.	.30½	–
Selenium, powd., 99.99% Se, dms., divd. ....lb.	13.60	–
coml., 99.5% Se, same basis ....lb.	10.00	15.00
Senna leaves, Alexandria, whole and half, bls. ....lb	.75	.80
Tinnevelly, No. 1, bls. ....lb.	.70	.71
powd., bbls., bxs. ....lb.	.90	1.10
Sesame oil, USP, dms., l.c.l. ....lb.	1.00	1.20
Sesame seed, Central American, hulled, bgs ....lb.	.50	.51
Sienna pigment, burnt, paper bgs., l.c.l., works ....lb.	.10½	.20½
raw, paper bgs., l.c.l., works ....lb.	.18¼	.23¼
Silica, amorph. dry-grd., bgs., c.l., works 93%, 200 mesh ....ton	31.00	32.50
98%, 200 mesh ....ton	32.00	33.50
93%, 97%, 325 mesh ....ton	34.50	35.50
98.5%, 325 mesh ....ton	37.00	–
99.5%, 325 mesh ....ton	51.50	54.50
Silica, dry-grd., bgs., c.l., works, 99.8%, 400 mesh, micronized ....ton	72.00	75.50
99% under 15 microns, micronized ....ton	78.50	82.50
99% under 10 microns, micronized ....ton	104.00	105.00
Silica, hard-quartz, 99.5% SiO_2, 325 mesh, bgs., c.l., works ....ton	37.00	–
140 mesh, bgs., c.l., works ....ton	34.75	–
Silicon tetrachloride, tech., dms., c.l., works ....lb.	.50	–
tanks, works ....lb.	.36	–
Silver bullion, ingots, cs., Troy ....oz.	5.265	–
Silver cyanide, 80% Ag 500-oz. lots ....oz.	4.2188	–
Silver nitrate, ACS, 63.2 Troy oz. AG/100 avdp. oz. $AgNO_3$ ....oz.	3.153	–
Soapbark, crushed, bls. ....lb.	1.00	–
powd., bls. ....lb.	1.35	1.85
Soda ash, dense, 58%, 100-lb., paper bgs. c.l., works, f.o.b. ....ton	120.00	–
bulk, c.l., same basis ....ton	83.00	–
light 58%, 100-lb., paper bgs., c.l., same basis ....ton	150.00	–
bulk, c.l., same basis ....ton	123.00	–
Soda, caustic, liq., 50%, sellers tanks, Gulf Coast works, f.o.b., frt. equal., 76% Na_2O ....ton.	175.00	195.00
73%, same basis ....ton.	205.00	225.00
flake, 76%, 400-lb. dms, c.l. works ....ton.	500.00	570.00
solid, 76%, 700-lb. dms, c.l. works ....ton.	520.00	570.00
gran., 75%, 450-lb. dms, c.l. works ....ton.	520.00	–
beads, 76%, 400-lb. dms., c.l., works ....100 lbs.	27.50	28.50
Prices for liq. rayon-type, $15 ton higher. Prices in West 70c. higher for solid, and $20–$30 ton higher for gran. and beads.		
Soda, sal., conc., bgs., c.l. works ....100 lbs.	3.35	3.65
Sodium acetate, anhyd., bgs., c.l., f.o.b. works ....lb.	.54	–
Sodium acetate, USP, 60%, gran. 100-lb. dms., c.l., works ....lb.	.57	–
Sodium alginate, NF, white powd., dom., 100 lbs. or more ....lb.	8.00	8.75
Sodium p-aminosalicylate, dms., 100-lb. lots or more, f.o.b. works ....lb.	4.73	–
Sodium antimonate, bgs., c.l., divd. E. ....lb.	1.48	1.50
Sodium ascorbate, USP, dms., 100 kilos ....kilo.	8.30	10.50
Sodium benzoate, tech., bgs., c.l., t.l., frt. ald. ....lb.	.70½	–
Sodium benzoate, USP, 80-lb. bgs., c.l., t.l., frt. ald. ....lb.	[illegible]	–
[illegible]		
Sodium bicarbonate, USP, powd., reg. grade, bgs., c.l., t.l., works, frt. equald. ....100 lbs.	17.05	–
coarse, same basis ....100 lbs.	18.05	–
fine, same basis ....100 lbs.	17.20	–
gran., same basis ....100 lbs.	17.65	–
gran., fine, same basis ....100 lbs.	17.60	–
Sodium bichromate, gran., bgs., c.l., t.l., works, frt. equald. ....lb.	.57	–
Sodium bifluoride, 400-lb. dms., c.l., frt. equald. ....lb.	.78	–
100-lb. bgs., c.l., same basis ....lb.	.78	–
Sodium bisulfate, bulk, c.l., works ....ton	175.00	–
dms., c.l. ....100 lbs	13.00	–
Sodium bisulfite, anhyd. bgs., c.l., t.l., works, East ....100 lbs	28.50	–
works, West ....100 lbs	32.00	–
Sodium bisulfite, soln., 38%, bulk, 100% basis, works, East ....100 lbs.	20.60	–
soln., 100%, bulk, works, West ....100 lbs.	20.00	–
photographic grade, 43% soln., works ....100 lbs.	21.80	–
Sodium borate NF, gran., bgs., c.l., works ....lb.	.51	–
powd., same basis ....lb.	.52	–
Sodium borohydride, powd., dms., 1000-5000 lbs. works ....lb.	18.88	21.80
Sodium borohydride, stabilized water soln., 12% $NaBH_4$, 100% basis. 3000 gal. tankwagon, works ....lb.	17.45	–
Sodium bromide, 99%, gran., 400-lb. dms., f.o.b. works ....lb.	1.04	–
Sodium carbonate, decahydrate, bgs, c.l., t.l., works ....ton.	284.00	–
Sodium carbonate, cryst. monohydrate (see Soda, ash)		
Sodium carbonate, monohydrated, bgs., c.l., t.l., works ....ton	392.00	–
Sodium carboxymethyl cellulose (see CMC.)		
Sodium chlorate, bulk, t.c., t.l., f.o.b. works ....ton	420.00	440.00
Sodium chlorate, cryst., 450-lb. dms., c.l., works, E. ....lb.	.27	–
Sodium chloride, tech. (see Salt)		
Sodium chloride, USP, gran., bgs. ....lb.	.28	–
Sodium chlorite, tech., dms., c.l., works ....lb.	1.17	1.27
Sodium chromate, anhyd., dms., c.l., t.l., works ....lb	.67	–
Sodium chromate, tetrahydrate, bgs., c.l., t.l., works ....lb.	.64	–
Sodium citrate, gran., anhyd., 200-lb. dms., c.l., t.l., N.Y. ....lb	1.85	–
Sodium citrate, USP, gran., dihydrate, 100-lb. bgs., t.l., f.o.b. shipping point ....lb.	.74½	–
Sodium cyanate, dms., 1,000-lb. lots, works ....lb.	.85	–
Sodium cyanide, briquettes or gran., 99% min., 200-lb. dms, min., f.o.b. works ....lb.	.68	–
Sodium diacetate, anhyd., dms., c.l., works ....lb.	.68	–
Sodium diacetate, FCC, 50-lb. bgs., t.l., divd E. of Rockies ....lb.	.61	.67
Sodium diacetate, tech., 50-lb. dms., c.l., works ....lb.	.52	–
Sodium erythorbate, powd., gran., t.l. or mixed t.l., f.o.b. shipping point ....lb.	2.60	2.85
Prices W. of Denver 2c. per pound higher.		
Sodium ferrocyanide, bgs., t.l., works ....lb.	.80	–
Sodium fluoborate, tech., gran., dms., t.l., works, frt. equald. ....lb	1.77	–
Sodium fluoride, white, 97%, 400-lb. dms., c.l., works, frt. equald. ....lb	5345	–
100 bgs., c.l., same basis ....lb.	.60	–
USP powd., 200-lb. dms., t.l., f.o.b. shipping point ....lb.	4.69	–
Sodium formate, bgs., c.l., works ....lb.	.20	–
Sodium gluconate, tech., 50-lb. bgs., 2,500 lbs. or more frt. ald. ....lb.	.60	–
Sodium hydride, oil dispersion, 60% NaH, 187-lb. dms., 10 dms., works ....lb.	1.89	–
Sodium hydrosulfide. (see Sodium sulfhydrate.)		
Sodium hydrosulfite, dms., c.l., t.l., f.o.b. shipping point E ....lb.	.84	–
Sodium hydroxide, USP, pellets, 100-lb. dms., c.l., t.l., works, frt. equald. ....lb.	.95	.98
Sodium hydroxide, tech. (see Soda, caustic.)		
Sodium hypophosphite, EN grade, 300 lb. dms f.o.b. works ....lb.	1.425	1.50
110 lb. dms. ....lb.	1.47	1.52
Sodium hyposulfite (see Sodium thiosulfate).		
Sodium iodide, USP, cryst., 300- to 500-lb. lots. dms. frt. equald. ....lb.	14.72	–
Sodium lauryl sulfate, 30%, tanks, f.o.b. works ....lb.	.29	.32
Sodium lignin sulfonate, bgs., c.l., works ....100 lbs.	25.50	–
Sodium metabisulfite (see Sodium bisulfite).		
Sodium metaborate, octahydrate, gran., bgs., c.l., works ....lb.	.38	–
tetrahydrate, gran, bgs, c.l., works ....lb.	.49	–
Sodium, metallic, 12-lb. bricks, dms., c.l. works ....lb.	.93	–
fused, dms. 24,000-lb. lots or more, works ....lb.	.87	–
tanks, works ....lb.	.70	.80
Sodium metaphosphate, tech. bgs., c.l., f.o.b. shipping pt. frt. equald ....100 lbs.	61.50	–
food grade, bgs. c.l. f.o.b. frt. equald. ....100 lbs.	68.25	–
Sodium metasilicate, anhyd., bgs., c.l. works ....100 lbs.	27.25	–
bulk, c.l., works ....100 lbs.	25.30	–
pentahydrate, bgs., c.l., f.o.b. shipping point ....100 lbs.	18.95	–
bulk, c.l. works ....100 lbs.	17.20	–
Sodium molybdate, anhyd., dms, f.o.b. works, 100 lbs and over ....lb.	4.87	–
cryst., dms., t.l., same basis ....lb.	4.12	–
Sodium naphthionate, dms., c.l., t.l., f.o.b. works ....lb.	2.00	–
Sodium Nitrate, USP, bgs., c.l., f.o.b. frt. equald. ....100 lbs.	34.50	–
Sodium nitrate, dom., industrial, bgs., c.l., works ....ton	284.00	292.00
bulk, c.l., works ....ton	250.00	–
imp., coml., 100-lb. bgs., c.l., Atl. or Gulf whse. ....ton	205.00	214.00
bulk, c.l., same basis ....ton	182.00	–
[illegible]		
Sodium orthosilicate, tech., anhyd., bgs., c.l., works ....100 lbs.	34.50	–
Sodium orthosilicate, tech., hydrated, flake, dms., c.l., works. ....100 lbs.	27.45	–
bgs., c.l., works ....100 lbs	26.25	–
Sodium oxalate, 89%, bgs., f.l., works ....lb.	.45	–
Sodium pentachlorophenate, beads c.l., 30,000-lb min. ....lb.	.67	–
bgs. ....lb.	.66	–
Sodium pentobarbital (see Pentobarbital-sodium).		
Sodium perborate, tetrahydrate, tech., bgs., c.l., t.l., works ....lb.	.32½	.38½
Sodium persulfate, 225-lb. dms., 24,000 lbs. or more, f.o.b. plant ....lb.	.83½	–
55-lb. bgs. same basis ....lb.	.82	–
Sodium phenobarbital (see Phenobarbital-Sodium).		
Sodium phenolsulfonate, powd., dms. ....lb.	.76	–
Sodium phosphate, anhyd., dibasic tech., bgs., c.l., f.l., works, frt. equald. ....100 lbs.	54.50	–
food grade, same basis. ....100 lbs.	57.50	–
Sodium phosphate, monobasic, tech., same basis ....100 lbs.	55.75	–
food grade, same basis. ....100 lbs.	58.75	–
tribasic, tech., same basis. ....100 lbs.	52.25	52.75
food grade, same basis. ....100 lbs.	63.25	–
chlorinated, same basis ....100 lbs.	31.50	–
cryst., tech., same basis ....100 lbs.	30.50	–
cryst., food grade, same basis ....100 lbs.	35.50	–
USP, dried, powd., bgs., dms., works ....lb.	.18	.20½
Sodium picramate, tech., paste, 200-lb. dms., dry basis, divd. ....lb.	5.50	–
Sodium propionate, dms., 2,000 lbs. or more, f.o.b. frt. alld ....lb.	.54	–
Sodium pyrophosphate, acid, tech, bgs., c.l. works, frt equald. ....100 lbs.	58.25	–
food grade, non-leavening, bgs., c.l., works. frt. equald. ....100 lbs.	51.25	–
Sodium pyrophosphate, ferric, dms., c.l., t.l., works ....lb.	.3880	–
Sodium pyrophosphate, tetrabasic, anhyd., tech., bgs., c.l., t.l., works, frt. equald. ....100 lbs.	44.75	–
bulk, hopper cars, same basis ....100 lbs.	42.50	–
food grade, bgs., c.l., t.l., same basis ....100 lbs	53.00	–
Sodium salicylate, USP, cryst., 200-lb. dms., 1,000-lb. lots or more, works, frt. equald ....lb.	3.00	–
USP, powd., 200-lb. dms., 1,000-lb. lots or more, same basis ....lb.	3.05	–
Sodium sesquicarbonate, bulk, c.l., t.l., works ....ton	170.00	–
bgs., c.l., t.l. works ....100 lbs.	198.00	–
Sodium silicate, solid, or glass, 3.22-3.25 ratio, bulk, c.l., t.l., works ....100 lbs.	15.70	–
bgs., c.l., t.l. works. ....100 lbs.	27.75	–
1.95-2.00 ratio, bulk, c.l., t.l., works ....100 lbs.	20.30	–
bgs., c.l., t.l., works ....100 lbs.	22.15	–
soln., 37.6° solid, 3.22-3.25 ratio, bulk, c.l., t.l., frt. equald ....100 lb.	8.30	–
"Ratio" indicates percentage by weight of SiO_2 divided by percentage by weight of Na_2O.		
Sodium silicofluoride, bgs., c.l., t.l., works, frt. equald. ....100 lbs.	17.95	19.75
Sodium stannate, dms. wks. frt. ald. E. ....lb	N.A.	–
Sodium sulfanilate, dms, works ....lb.	.22	–
Sodium sulfate, NF XII, powd., dms., 2,000-lb. lots ....lb.	.23½	–
tech., detergent, rayon-grade, c.l., works. Gulf ....ton	80.00	98.00
Sodium sulfate, West, bulk, c.l., works, frt equald. ....ton	90.00	101.00
bulk, c.l., East, same basis ....ton	113.00	114.00
Sodium sulfate, photo grade, 100-lb. bgs., c.l., works ....ton	47.00	53.00
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works, frt. equald. ....ton	500.00	–
liq., 44-48%, tanks, works, frt. equald. ....ton	500.00	–
Sodium sulfide, flake, dms., c.l., works, E., frt. equald. ....ton	470.00	–
bgs., same basis ....ton	410.00	–
Sodium sulfide, fused, dms., c.l., works, E., frt. equald. ....ton	240.00	–
Sodium sulfite, anhyd., tech. 95-100% bgs, f.o.b. works ....100 lbs.	23.76	–
Sodium sulfocyanide CP (see Sodium thiocyanate).		
Sodium tetraborate (see Borax).		
Sodium tetrasulfide, liq. 34%, dms., c.l., works., frt. equald. ....ton	540.00	–
Sodium thiocyanate, purif., cryst., 250-lb. dms., 5 dms. or more f.o.b. works ....lb.	3.26	–
tech., anhyd. dms., 2,000 lbs. or more, works ....lb.	.97	–
Sodium thiosulfate, tech., photo- grade, anhyd., 100-lb. bgs., c.l., t.l., works, frt. equald. ....100 lbs.	45.60	–
cryst. pentahydrate, c.l., t.l., same basis ....100 lbs.	28.50	–
Sodium titanate, dms., c.l., works ....lb.	.14½	–
Sodium trichloroacetate, 95%, 50-lb. bgs., c.l., frt. ald. E. ....lb.	.28	–
Sodium tripolyphosphate, tech., bgs., c.l., t.l., works, frt. equald. ....100 lbs.	39.75	–
bulk, hopper cars, same basis ....100 lbs.	37.50	–
food grade, bgs., c.l., t.l., same basis ....100 lbs.	48.50	–
Sodium tungstate, tech. high moly., dms., 10,800 lbs. or more, frt. ald. ....lb.	5.00	5.50
Folin grade dms., 10,800 lbs. or more, same basis ....lb.	8.00	–
Sodium-ammonium phosphate, purif., cryst., dms., works ....lb.	.52	–
Sodium-formaldehyde sulfoxylate, dms., t.l., f.o.b. works ....lb.	.91	–
Sodium-zirconyl sulfate, dms., 1,000-lb. lots or more, works ....lb.	.28	–
tech., dms., any quantity, works ....lb.	.16	–
Solvent naphtha, petroleum, straight aromatic, b.r. 320°-350°F, 55°F m.a.p., tanks:		
New Jersey ....gal.	1.52	–
Houston ....gal.	1.41	–
Illinois ....gal.	1.54	–
Solvent naphtha, petroleum, straight aromatic, b.r. 380°F-410°F, 60°F m.a.p., tanks:		
New Jersey ....gal.	1.30	1.35
[illegible]		

CHEMICAL PRICES

WEEK ENDING AUGUST 8, 1988

Sorbitan monostearate, dms., c.l., t.l., 30,000 lb. min., f.o.b. works ....lb.	.76	–
Sorbitan tristearate, c.l., t.l., 30,000 lb. min., f.o.b. works ....lb.	.80	–
Sorbitol, USP, reg. 70% aqueous, dms., c.l., f.o.b. shipping point ....lb.	.35	–
tanks, f.o.b. shipping point ....lb.	.30	–
gran., dms., c.l. t.l., works ....lb.	.70	.74
powd., dms., c.l., t.l., works ....lb.	.88	.72
Soybean meal (See Oils, Fats & Waxes market report.)		
Soybean oil (See Oils, Fats & Waxes market report.)		
Soybean oil acidulated, soapstock, 95% acid, tanks, New York ....lb.	.14	.15
Soybean oil, acid, dbl. dist., dms. ....lb.	.46	.59
tanks ....lb.	.43	.44
e.d., dms. ....lb.	.47	.58
tanks ....lb.	.38	.43
Spearmint leaves, imp., bls. ....lb.	2.50	2.70
Spearmint oil, Far West, native ....lb.	14.00	15.00
Midwest, native ....lb.	10.00	12.00
Far West, Scotch ....lb.	15.00	15.50
Midwest, Scotch ....lb.	14.50	15.25
Spruce oil, dms. ....lb.	8.00	–
St. John's bread, edible, bls. ....lb.	.29	.30
zStannic chloride, anhyd., dms., works ....lb.	N.A.	
Stannic oxide, dms., works ....lb.	N.A.	–
Stannous chloride, anhyd., dms wks ....lb.	N.A.	–
Stannous fluoborate, liq., conc., dms., t.l., works, frt equald. ....lb.	2.50	–
Stannous oxide dms., works ....lb	N.A.	–
Stannous sulfate, dms., works ....lb.	N.A.	–
Stearic acid, double pressed, bulk ....lb	.25	.39
single-pressed, bulk ....lb.	.28	375
triple-pressed, bulk ....lb.	.32	.40
Stramonium leaves, bgs. ....lb.	.15	.20
Streptomycin sulfate, USP, bulk ....kilo.	47.00	–
Strontium carbonate, glass grd., bgs., t.l., works ....lb.	.37½	–
Strontium nitrate, 50-15 bgs., c.l., works ....100 lbs.	51.50	–
Styrene monomer, 99.8% min., t.c., t.l., f.o.b. works ....lb	.21	–
Styrene-acrylonitrile resin, nat, bulk, f.o.b. plant ....lb	.77	–
cryst., bulk, same basis ....lb	.77	.81
clear, same basis ....lb.	.77	.81
Styrol acetate, dms. ....lb.	2.35	–
Succinic acid, purif., cryst., dms., t.l., frt. alld. ....lb.	2.00	2.10
Succinic anhydride, dms., c.l., t.l., f.o.b. work ....lb	1.71	–
Sucrose, refd., white, bgs., c.l., f.o.b. refy. E ....100 lbs.	33.10	–
Sucrose acetate, isobutyrate, 90% dms., t.l., divd. ....lb.	1.18	–
tanks, divd. ....lb.	1.10	–
100%, dms., t.l., divd. ....lb.	1.18	–
Sucrose octa-acetate, denaturing grade, 100-lb. dms., f.o.b. works ....kilo	12.50	13.50
Sulfabenzamide, dms., 500 kilos. ....kilo.	39.50	–
Sulfabenzamide-sodium, dms., 500 kilos. ....kilo.	25.00	–
Sulfacetamide, USP, dms., 500 kilos. ....kilo.	20.00	23.50
Sulfadiazine, USP, powd. dms., 500 kilos. ....kilo.	53.00	–
Sulfadiazine-sodium, USP, dms., 500 kilos. ....kilo.	40.70	–
Sulfamerazine, USP, microcrystals, dms., 500 kilos ....kilo.	33.50	–
USP, powd., dms., 500 kilos ....kilo.	32.00	–
Sulfamethazine-sodium, USP, powd. dms., 50 kilos ....kilo.	13.00	–
Sulfamethazine, powder, dms., 500 kilos. ....kilo.	8.50	10.00
Sulfamic acid, cryst., bgs., c.l., t.l., works ....100 lbs.	38.00	41.00
Sulfamic acid, gran., dms., c.l., t.l., works ....lb.	.38	–
Sulfanilamide, NF, reg. 1,000-lb. dms., frt. equald. ....lb.	2.00	–
Sulfanilic acid, tech., bgs., t.l., f.o.b. works ....lb.	.67½	–
Sulfaquinoxaline, veterinary, grade, dms. ....lb.	8.00	–
Sulfur, crude, bright, molten, dom., f.o.b. vessels, Gulfports ....long-ton	150.00	–
f.o.b. La. refy ....long-ton	126.50	–
recovered, divd., Houston ....long-ton	125.50	–
ex terminal, Rotterdam ....long ton	135.00	–
f.o.b. tanks, Alberta, Canada, for US delivery ....long-ton	102.00	–
dark, ex-Tampa, Fla. ....long-ton	157.50	–
Sulfur, crude, 99.5% min. purity, coml. flour, 50-lb. bgs., c.l., mines basis ....100 lbs.	13.80	–
lump, same basis ....100 lbs.	13.60	–
Sulfur, refd., 99.5% min. purity, rolls 50-lb. bags, c.l., mines basis ....100 lbs.	17.50	–
flour, light, 50-lb. bgs., same basis ....100 lbs.	20.00	–
Sulfur, refd., sublimed, NF, 99.85% min. purity, 50-lb. bgs., c.l. mines basis ....100 lbs.	28.00	–
Sulfur, rubbermakers, 99.5% min. purity, coml., reg., 50-lb. bgs., c.l., mines basis ....100 lbs.	14.60	–
fine, 88% min. passing through 325 mesh, same basis ....100 lbs.	16.10	–
Sulfur dichloride, dms., c.l., works, frt. equald. ....lb.	.24	–
tanks, same basis ....lb.	.17¾	–
Sulfur dioxide, liq., coml., multi-unit cars, dms., f.o.b. works ....ton	275.00	–
tanks, works ....ton	210.00	220.00
[illegible]		

CHEMICAL PRICES

WEEK ENDING AUGUST 8, 1986

Sulfuric acid, virgin 100% tanks, works,
East Coast .... ton 71.75 95.90
Gulf Coast .... ton 75.00 88.40
Midwest .... ton 80.25 -
Southeast .... ton 98.15 -
West Coast .... ton 85.00 -
NOTE: For prices on 60 and 66 Be., multiply by .7767 and .9318, respectively. For price of 20% fuming oleum, as is, add $3-$4 to above prices and multiply by 1.045.
Sulfuric acid, smelter, 100% tanks, works,
Gulf Coast .... ton 48.00 52.00
New Mexico .... ton 20.00 25.00
Southeast .... ton 83.15 -
93%, tanks, dlvd. Northwest ton 60.00 65.00
Sulfurous acid, crude, f.o.b. Minneapolis .... lb. .19 .20
Superphosphate, triple, 46% or more, a.p.a., run-of-pile, bulk, c.l., Fla. .... unit-ton 2.75 3.05
bulk, gran., c.l., Fla. .... ton 190.00 165.00

T

Talc, dom., grd. New York bgs., c.l., works .... ton 84.00 -
99.5%, 325 mesh, bgs., c.l., works .... ton 84.00 90.00
Talc, dom., 99.5%, 400 mesh, micronized, bgs., c.l., works., ton 197.00 236.00
925 mesh, micronized, bgs., c.l., works .... ton 200.00 -
dom., ord., Calif. grd., bgs., c.l., works .... ton 90.00 -
ord., Vermont, off-color grd., bgs., c.l., works .... ton 136.00 -
Imp., Canadian, grd., bgs., c.l., works .... ton 70.00 84.00
Tall oil, crude, Southeast, tanks, works, frt. equald. .... ton 135.00 140.00
Tall oil, refd., acid, same basis .... lb. .91 -
distd., tanks, same basis .... lb. .19 .23
Tall oil acids, 2% or more rosin, tanks, works, frt. equald. .... lb. .20½ .23½
less than 2% rosin acid .... lb. .22 .27
Tallow (see Oils, Fats & Waxes market report.)
Tallow, fatty acids, tech., non-rel. dms., c.l., dlvd .... lb. .37 .40
tanks, dlvd. .... lb. .29 .45
hydrogenated, tech., flake, bgs., c.l., dlvd. .... lb. .37 .33
tanks, dlvd. .... lb. .35 .42
Tangerine oil, Fla., drs. f.o.b. .... lb. 10.50 11.00
Italian dms. .... lb. 52.90 -
Tankage, animal feeding, 9-11% NH_3, New York, bulk .... unit-ton 5.50 -
Tankage, fert. grade (see Nitrogenous process tankage).
Tannic acid, NF, fluffy, bbls., 1,000-lb. lots .... lb. 6.09 -
tech., powd., dms. .... lb. 4.52 -
Tar acid oil, 15-19% t.l., dms, f.o.b. works .... gal. 1.40 -
25-28% t.l., dms., f.o.b. works .... gal. 1.59 -
50-53% t.l., dms., f.o.b. works .... gal. 1.97 -
Tartaric acid, NF, bgs. .... lb. 1.20 1.50
Tellurium, metallurgical f.o.b. works .... lb. 12.00 -
Terpinhydrate, NF, imp., cryst., powd., 38 kilo drums, f.o.b. ship. pt., frt. equald. .... lb. 1.35 -
Terpineol .... lb. 1.10 1.50
Terpinyl acetate, extra, dms .... lb. 2.40 -
prime, dms. .... lb. 1.36 2.05
Terpinyl propionate, dms. .... lb. 4.50 -
Tetrachloroethylene, tech. (see Perchloroethylene).
Tetrachloroethylene, USP, dms., c.l., works .... lb. .30¼ -
Tetraethyl orthosilicate, bulk, f.o.b. works .... lb. 1.59 1.86
Tetraethylene glycol, tanks, frt. ald. .... lb. .97 -
Tetraethylene glycol diacrylate, l.l. dms., f.o.b. works .... lb. 1.50 -
Tetraethylenepentamine, tanks, same basis .... lb. 1.70 1.75
Tetraethylthiuram disulfide, tech., flake, dms., t.l., frt. ald. .... lb. .69 2.07
Tetrahydrofuran dms., c.l., t.l., f.o.b. works .... lb. 1.02 -
tanks, same basis .... lb. .96 -
Tetrahydrofurfuryl alcohol tanks, f.o.b. Memphis, Tenn. .... lb. .78 -
Tetrahydronaphthalene, dms. .... lb. 7.20 -
Tetrahydrophthalic anhydride dms., c.l., t.l. f.o.b. works .... lb. .65 -
Tetrapotassium phosphate (see Potassium pyrophosphate, tetrabasic).
Tetrasodium pyrophosphate (see Sodium pyrophosphate, tetrabasic.)
Thallium metal, dlvd. .... lb. 35.00 -
Thallium sulfate, 99%, bbls., dlvd. kilo 140.00 -
Theobromine, bulk f.o.b. works .... lb. 4.00 4.50
Theophylline, USP, anhyd. 50-kilo dms., 10,000-kilo lots .... kilo 12.00 12.95
Thiamine hydrochloride, USP 100-kilo dms., dlvd. .... kilo 27.00 31.00
Thiamine mononitrate, USP, 100-kilo, dms., dlvd. .... kilo 27.00 31.00
Thiodiphenol, 88%, dms., f.o.b. works .... lb. 3.35 -
Thioflavin green toners, molybdated, PMA, dms. .... lb. 5.40 9.05
tungstated, PTA, dms. .... lb. 5.60 5.85
Thioglycolic acid, reld., dms., ton lots 100% acid basis .... lb. 2.07 -
Thioindigoid maroon, dms., frt. ald. .... lb. 7.80 -
reds, dms., frt. ald. .... lb. 5.68 6.12
Thionyl chloride, high-purity, 99.6%, 24,000-lb. min. t.l., dms., frt. equald. .... lb. .55 -

Thorium nitrate, purif., dms., 100-lb. lots or more, works .... lb. 2.75 -
dl-Threonine, dms 10 kilos wks .... kilo 126.00 -
Thyme leaves, French, bgs. .... lb. .90 .95
Spanish, bgs. .... lb. .88 1.10
Thyme oil, NF, red, dms. .... kilo 20.00 -
NF, white, dms. .... kilo 22.00 -
Thymol, NF .... lb. 3.75 6.15
Thymol iodide, dms., 100-lbs. f.o.b. works .... lb. 52.30 56.20
Tin metal (NY composite) .... lb. N.A. -
Titanium dioxide, anatase, bgs., 20-ton lots, frt. ald. .... lb. .73 .74
slurry shipments, 50-ton lots, dry basis, frt. ald. .... lb. .72 .74
Titanium dioxide, rutile, reg., bgs., 20-ton lots, frt. ald. .... lb. .76 -
slurry shipments, 50 ton lots, dry basis, frt. ald. .... lb. .80 -
Non-chalking rutile material costs 1c. per pound more.
Titanium hydride powd. electronics grade, dms. .... lb. 26.50 -
Titanium tetrachloride, tech., bulk, c.l., f.o.b. works .... lb. .30 .35
200-gal cylinders c.l., same basis lb. .50 -
Titanium sponge, 99.3%, fiber drums, less than 5,000 lbs. f.o.b. wks. .... lb. 4.85 -
Toblas acid, 2,000 lbs. or more .... lb. 2.45 -
d-a-Tocopherols, 57%, dms. .... kilo 50.09 -
d-a-Tocopheryl acetate, 91% conc., dms. .... kilo 57.49 -
d-a-Tocopheryl acid succinate, cryst., dms. .... kilo 79.44 -
dl-a-Tocopherol, dms. .... kilo 27.40 -
dl-a-Tocopheryl acetate, USP 50-kilo dm. 1000 kilo min. .... kilo 15.00 19.50
50% dry powd., 50-kilo dm. .... kilo 17.00 -
Tolu balsam, cns. .... lb. 7.60 9.68
Toluene, petroleum, ind. or nitration, tanks
Atlanta, Ga., dlvd. .... gal. 1.35 -
Bayonne, N.J., dlvd. .... gal. 1.32 -
Baytown, Tex., f.o.b. .... gal. 1.37 -
Chicago, Ill. dlvd. .... gal. 1.2823 -
Clarion, Pa., f.o.b. .... gal. 1.15 -
Deer Park, Tex., f.o.b. .... gal. 1.37 -
Ft. Wayne, Ind., dlvd. .... gal. 1.34 -
Gulf Coast, spot, barges .... gal. .59 .60
Houston, Tex., dlvd. .... gal. 1.22 -
New Jersey Metro, dlvd. .... gal. 1.32 -
Philadelphia, Pa., dlvd. .... gal. 1.28 -
Providence, R.I., dlvd. .... gal. 1.35 -
Toluene di-isocyanate (mixed isomers), 80%, 2,4- and 20% 2,6- isomers, jumbo tankcars, dlvd. .... lb. 1.01 -
p-Toluenesulfonamide, powd., dms., t.l., works .... lb. 3.55 -
m-Toluidine, tech, bulk .... lb. 3.10 -
o-Toluidine, tech., liq., dms. c.l. .... lb. .72 .75
bulk, same basis .... lb. .60 .64
p-Toluidine, tech. cast solid, dms., cl., works .... lb. 1.90 1.96
Liq., tanks, same basis .... lb. 1.70 -
flake, same basis .... lb. 1.95 -
Toluidines, mixed, o-m-p, tech., liquid, c.l. f.o.b. works .... lb. 1.03 -
bulk, same basis .... lb. .95 -
Tolylbiazole, dms., 1,000-lb. lots, f.o.b. Cincinnati, Ohio .... lb. 2.90 -
Tonka beans, Angostura, prime, 1,000-lb. lots .... lb. 6.50 -
Toxaphene, dms., c.l., t.l., works .... lb. .39 -
Tragacanth gum, No. 1, ribbons, cns. lb. 36.00 40.00
flaked powder .... lb. 12.50 15.00
Triacetin tanks, dlvd. E .... lb. .75 -
Tributyl citrate, t.l. drums, f.o.b. works .... lb. 1.70 -
Tributyl phosphate, tanks, works .... lb. 1.95 1.77
Tributylamine, dms., c.l., dlvd. .... lb. 1.39 -
tanks, same basis .... lb. 1.33 -
Trichloroacetic acid, tech., 300-lb. dms., c.l., f.o.b. works .... lb. .94 -
USP, 100-lb. dms., frt. equald. .... lb. .99½ -
1,2,4-Trichlorobenzene, pure, tanks, dlvd. .... lb. .61½ -
1,1,1-Trichloroethane, tanks, consumer, dlvd. .... lb. .43 -
1,1,2-Trichloroethane, tanks, f.o.b. works .... lb. .42 -
Trichloroethylene, tanks, dlvd. .... lb. .38½ -
Trichloroisocyanuric acid, dms., t.l. .... lb. 1.25 -
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln., con-rel. dms., 1,500-lb. lots, dlvd. .... lb. 1.35 -
Tricresyl phosphate, tanks, f.o.b. works .... lb. 1.55 1.60
Tridecyl alcohol, mixed isomers, tanks, dlvd. .... lb. .57 -
Triethanolamine, 85%, tanks, dlvd. E. lb. .45 .46
99%, tanks, same basis .... lb. .45 .48
Triethanolamine lauryl sulfate, tanks, f.o.b. works .... lb. .27¼ .27½
Triethylamine, dms., c.l., dlvd. .... lb. 1.33 -
tanks, same basis .... lb. 1.20 -
Triethyl citrate, t.l., drums, f.o.b. works .... lb. 1.92 -
Triethyl phosphate, tanks, dlvd. .... lb. 1.15 -
Triethylene glycol, tanks, f.o.b. Gulf lb. .47 -
Triethylene glycol dipelargonate, tanks f.o.b. works .... lb. .29½ -
40-60% tanks, 100% basis, frt. equald. .... lb. .35 -
Triethylenetetramine tanks, frt. equald. lb. 1.43 1.45
Tri-iso-octyl trimellitate, f.o.b. works lb. .51 .55
Tri-isobutylene, tanks, dlvd. .... lb. .45 -
Tri-isopropanolamine, dms., c.l., frt. ald. E .... lb. .57½ -
Trimethylamine, anhyd., tanks, frt. equald., 100% .... lb. .54½ -
25% soln., tanks, frt. equald., 100% basis .... lb. .63½ -
40% soln., tanks, frt. equald., 100% basis .... lb. .56½ .57
Trimethylolpropane bgs c.l. t.l. dlvd. lb. .73 -
Trimethylolpropane triacrylate, t.l. dms., f.o.b. works .... lb. 1.50 -
Tripentaerythritol, tanks, frt. ald., E. lb. 1.00 -
Triphenyl phosphate, dms., t.l., frt. ald. .... lb. 1.00 -
Tripropylene glycol tanks, frt. ald. lb. 1.64 .76
Tris-(hydroxymethyl)nitromethane, solid, t.l. works .... lb. .84 -
Trisodium phosphate (see Sodium phosphate, tribasic).
l-Tryptophan, dms, 25-kilo lots .... kilo 62.00 65.00
Tung oil, tanks, imp. New York .... lb. .34 .39
Tungstic acid 92½%, dms., 1,750-9,000 lbs., works .... lb. 12.85 -
Turmeric, Alleppey .... lb. .63 .70

Turpentine, crude sulfate tanks, f.o.b Southeast works .... gal 70 80

U

Ultramarine blue pigments, 550-2,000 lb.-lots, works .... lb. 1.30 -
violet, same basis .... lb. 2.20 -
Umber pigment, burnt, American, frt equald. .... lb. .13½ 15½
raw, American, dom., bgs., l.c.l., same basis .... lb. .13½ 14½
Undecylenic acid, dms., works .... lb. 2.70 -
Urea, 46% N, ind., bulk, 50-ton c.l., dlvd. .... ton 200.00 220.00
46% N, agricultural, bulk, dlvd. Midwest .... ton 200.00 215.00
46% N, agricultural, bulk, dlvd. West ton 210.00 -
Uva-Ursi leaves, bls. .... lb. 22 -

V

Valerian root, Belgian, bgs. .... lb. .65 .65
Indian bgs. .... lb. .45 -
Vanadium oxytrichloride, 3,000 lb. cyls., works .... lb. 5.40 -
Vanadium pentoxide, tech., gran., per lb. of V_2O_5 650-lb. dms. works .... lb. 4.10 4.94
fused or flake, per lb. V_2O_5, 550-lb. dms., works .... lb. 3.35 3.85
Vandyke brown, bgs., t.l., frt. equald. lb. .27½ -
Vanilla beans, Madagascar .... lb. 37.00 -
Java, tins .... lb. 27.00 30.00
Vanillin, USP, dms., f.o.b works .... lb. 6.25 -
Imp., dms. .... lb. 4.75 5.00
Veratrol Ag .... lb. .64 -
Vetiveryl acetate, dms. .... kilo 63.00 -
extra .... kilo 63.00 -
Vetiver oil, Bourbon, dms. .... lb. 16.00 17.00
Haitian .... lb. 23.00 24.50
Java .... lb. 31.00 -
Victoria blue toners, molybdated, PMA dms. .... lb. 8.20 8.30
tungstated, PTA, dms. .... lb. 10.40 -
Vinyl acetate monomer, tanks, dlvd. lb. .39 -
Vinyl chloride monomer, polymer grade, tanks, f.o.b. works .... lb. .29 -
Vinyl ether, USP, anesthesia, 75-cc. bots., hospitals .... bots. 1.56 -
2-Vinylpyridine t.l., dms. works .... lb. 7.81 -
tanks, works .... lb. 7.51 -
Vinyltoluene, bulk, f.o.b. .... lb. .57 .73½
Vitamin A, synthetic, dry, pharm. 500,000 A units per gm., 50-kilo lots .... kilo 33.00 -
Vitamin A, liq. in oil, pharm., 1,000,000 A units per gram, 10 kilo lots .... kilo 41.00 -
Vitamin B_1, feed grade, 650,000 units per gm. .... kilo 10.70 23.05
Vitamin B_2 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., non-sterile, USP (cyanocobalamin), vials, 50-gram lots .... gram 8.00 9.75
Vitamin B_{12}, 1% trituration of cryst. B_{12} (cyanocobalamin USP) with dicalcium phosphate, 25-kilo dms. .... kilo 10.75 12.75
Vitamin B_{12}, 0.1% trituration of cryst. B_{12} (cyanocobalamin USP) with mannitol, 25-kilo dms. .... kilo 15.60 -
Vitamin B_{12}, cobalamin concentrate NF with mannitol, 1,000 mcg. per gram, dms. .... per gram activity 19.45 -
Vitamin B_{12}, 1% Vitamin B_{12}, USP, absorbed on resin, 6-kilo dms., 500-gram lots, frt. ald. .... per gram activity 18.55 -
Vitamin B_{12}, 1% cobalamin concentrate, NF, absorbed on resin, 6-kilo dms., frt. ald. per gram activity .... 15.40 -
Vitamin B_{12}, 1% cyanocobalamin in gelatin, 2.5-kilo dms., frt. ald. .... per gram activity 15.40 -
Vitamin C (see Ascorbic acid).
Vitamin D (see Cholecalciferol).
Vitamin D_2 (see Calciferol and Fish liver oils).
Vitamin E (see a-Tocopherol and Wheat germ oil).
Vitamin H (see Biotin).
Violet methyl toner (see Methyl violet toner)

W

Warfarin 0.5%, dms., ton lots, frt. ald. New York or Chicago .... lb. .75 -
Wheat germ oil, cold-pressed .... gal. 16.50 17.50
cold-processed .... gal. 14.00 -
White precipitate, USP, powd. 100-lb. dms., f.o.b. works .... lb. 7.892 11.24
Whiting (see Calcium carbonate).
Wintergreen oil, syn. (see Methyl salicylate).
Witch hazel bark, bls. .... lb. 1.35 -
leaves, bls. .... lb. 1.75 -
400 mesh, bgs., c.l. works .... ton 134.00 -
325 mesh, bgs., c.l. works .... ton 117.00 -
high aspect ratio, bgs., works ton 164.00 -
Wollastonite, l.l., f.o.b., producing plant, general grade .... ton 200.00 -
325 mesh .... ton 140.00 141.00
400 mesh .... ton 160.00 -
1250 mesh .... ton 600.00 -
Wool grease, USP (see Lanolin).
Wormseed oil (see Chenopodium oil, NF)
Wormwood oil, cns. .... lb. 31.00 36.00

X

Xanthan gum, food 300-lb. dms., f.o.b. works .... lb. 5.96 6.20
ind., grade, same basis .... lb. 4.84 -

Xylene, petroleum, ind. or nitration, tanks
Alliance, La., f.o.b. .... gal. 1.08 -
Atlanta, Ga., dlvd. .... gal. 1.35 -
Bayonne, N.J. dlvd. .... gal. 1.29 -
Baytown, Tex. f.o.b. .... gal. 1.31 -
Chicago, Ill. dlvd. .... gal. 1.40 -
Clarion, Pa. .... gal. 1.36 -
Ft. Wayne, Ind. dlvd. .... gal. 1.22 -
Gulf Coast spot, barges .... gal. .75 -
Houston, Tex. dlvd. .... gal. 1.25 -
New Jersey Metro, dlvd. .... gal. 1.36 -
Xylene, petroleum, ind. or nitration, tanks
Philadelphia, Pa., dlvd. .... gal. 1.36 -
Providence, R.I., dlvd. .... gal. 1.42 -
South Bend, Ind., dlvd. .... gal. 1.37 -
m-Xylene, high purity, tanks, f.o.b. Texas City, Tex. .... lb. .36 -
o-Xylene tanks works .... lb. .195 -
p-Xylene tanks dlvd. .... lb. .195 -
m-Xylenediamine, dms. .... lb. 1.70 -
2,4 Xylidine, tech., bl., cl. .... lb. 1.50 -
Xylidines, mixed, o,m,p, dms. .... lb. 1.00 -

Y

Yam yam 25 lb. cns. .... lb. 2.91 -
Yeast, pure brewer's debittered, NF, Saccharomyces .... lb. 1.10 -
Yerba, santa leaves, bls. .... lb. 2.40 -
extra, bots. .... lb. 28.50 31.75
Ylang-ylang oil, extra grade .... lb. 23.95 -
grade I .... lb. 19.95 -
grade 2 .... lb. 15.50 -
grade 3 .... lb. 13.04 -

Z

Zein, bgs., 2,000-lb. lots .... lb. 7.50 -
Zinc acetate, NF, dms. .... lb. 1.50 -
Zinc borate, tech., 43% ZnO, 37% B_2O_3, 50-lb. bgs., 20,000-lb. t.l., f.o.b. works .... lb. .55 -
cryst., 37% ZnO, 48% B_2O_3, 250-lb. dms. 20,000-lb. t.l. f.o.b. wks .... lb. .86 -
Zinc chloride, USP, gran., dms. .... lb. .79 -
Zinc chloride, tech., soln., 50%, tanks, f.o.b. Cleveland, Ohio .... 100 lbs. 20.20 -
Concord, N.C. .... 100 lbs. 20.20 -
Freeport, Tex. .... 100 lbs. 20.20 -
Old Bridge, N.J. .... 100 lbs. 20.20 -
65 degree, same basis Cleveland, Ohio .... 100 lbs. 27.90 -
Concord, N.C. .... 100 lbs. 27.90 -
Old Bridge, N.J. .... 100 lbs. 27.90 -
70 degree, same basis Cleveland, Ohio .... 100 lbs. 29.70 -
Concord, N.C. .... 100 lbs. 29.70 -
Old Bridge, NJ .... 100 lbs. 29.70 -
72 degree, same basis Cleveland, Ohio .... 100 lbs. 33.20 -
Concord, N.C. .... 100 lbs. 33.20 -
Old Bridge, NJ .... 100 lbs. 33.20 -
Zinc chromate, bgs. .... lb. 1.12 -
Zinc cyanide, dms. .... lb. 1.85 -
Zinc dialkyldithiophosphate .... lb. .59 -
Zinc dimethyldithiocarbamate .... lb. .56 -
Zinc fluoborate .... lb. .46 -
Zinc fluosilicate .... lb. .44 -
Zinc naphthenate .... lb. .35 -
Zinc oxide, USP, 50 lb. bxs. .... lb. .60 -
Zinc oxide, pigment, American process, lead-free bgs. .... lb. .49 -
Zinc oxide pigment, French process regular, bgs. .... lb. .52 -
Zinc phenolsulfonate, purif., gran., 250-lb. dms. .... lb. 1.62 -
Zinc pyrophosphate .... lb. 3.50 -
Zinc resinate .... lb. .63 -
Zinc silicofluoride .... lb. .61 -
Zinc stearate, USP, bulk .... lb. .94 -
Zinc sulfate, gran., monohydrate .... lb. .28 -
agricultural grade powd., bulk .... ton 260.00 -
Zinc yellow (see Zinc chromate).
Zinc-ammonium chloride, bgs. .... lb. .49 -
Zinc undecylenate, dms., works .... lb. 4.40 -
Zinc-formaldehyde sulfoxylate .... lb. 1.65 -
Zircon gran. bgs., bulk c.l. works .... ton 240.00 -
Zircon milled bgs. .... ton 285.00 -
Zirconium acetate soln. .... lb. .86 -
Zirconium hydride, powd., electronic grade, dms. .... lb. 90.00 -
Zirconium oxide, powd. .... lb. 2.85 -
electronic, same basis .... lb. 4.70 -
insulating, stabilized .... lb. 4.25 -
insulating, unstabilized .... lb. 3.30 -
dense, stabilized .... lb. 3.00 -
Zirconium oxychloride .... lb. .50 -

CHEMICAL IMPORTS

US imports of chemicals and related materials are reported in this section by CPI material. Listings include consignee where possible, container, net weight, name of vessel (in parenthesis), port of origin and date of shipment's arrival in New York or the Port of Newark.

US chemical imports/exports are tabulated monthly in the market reports.

A-B

2 AMINO 4 CHLORO 5 NITROPHENOL Order 50 dms (11,490 lbs) (Ming Glory) Kobe, 8/26.
2 AMINO 6 METHOXY BENZOTHIAZOLE Order 4 dms (1,446 lbs) (Ming Glory) Kobe, 8/23.
2 CHLORPYRIDINE Max Gruenhut 12 dms (8,931 lbs) (Atlantic Service) Rotterdam, 8/24.
2 ETHYLHEXANOIC ACID Order 1 tnk (39,374 lbs) (Starfield) Antwerp, 8/26.
2 ETHYLHEXANOL Order of Shipper 1 bks (2,204,084 lbs) (Stephania) Rotterdam, 7/6.
2 METHYLENEGLUTARONITRILE Yuka Fine 46 dms (22,815 lbs) (Ming Glory) Kobe, 8/23.
3 AMINO 4 METHYL BENZAMIDE Order 17 dms (2,456 lbs) (Ming Glory) Kobe, 8/23.
312 MALACHITE GREEN CRYSTALS Penson 120 dms (7,831 lbs) (American Kentucky) Kobe, 6/24.
4 AMINOAZOBENZENE 4 SULPHONIC AG Mondeson 70 dms (23,422 lbs) (Ming Glory) Kobe, 6/23.
44 DIAMINODIPHENYLAMINE 2 SULFONICA Bemo Shpg 20 dms (6,504 lbs) (Ming Glory) Kobe, 6/23.
ABS RESIN NATURAL COLOR Order 42 plt (56,297 lbs) (Ever Gather) Kaohsiung, 6/25.
ACCEL BURF 6 VANPLAST 3S R T Vanderbilt 1,100 bgs (49,471 lbs) (Hanjin Yokohama) Yokohama, 6/25.
ACETAL FOLIEN Leschaco 23 plt (33,768 lbs) (Stuttgart Express) Rotterdam, 6/24.
ACETATE DL ALPHA TOCOPHEROL Rhone Poulenc 54 dms (27,816 lbs) (Atlantic Service) Le Havre, 6/24.
ACETATE LINALYL Order 79 dms (33 614 lbs) (Atlantic Concert) Le Havre, 6/24.
ACETOGUANAMINE James E Fox 720 bgs (40,316 lbs) (Ever Laurel) Hamburg, 6/22.
ACETOPHENONE Ward Smith 76 dms (37,256 lbs) (Ever Laurel) Rotterdam, 6/22.
ACETYL AMINOPHENOL Rhone Poulenc 360 pkg (42,253 lbs) (Atlantic Service) Le Havre, 6/24.
ACETYL PARA AMINOPHENOL Rhone Poulenc 1,440 pkg (170,349 lbs) (Atlantic Saga) Le Havre, 6/10.
ACID ASCORBIC ITEM Order 40 ctn (71,870 lbs) (Atlantic Concert) Le Havre, 6/24.
ACID BORIQUE Rhone Poulenc 360 bgs (40,000 lbs) (Ever Laurel) Le Havre, 6/22.
ACRONAL S 702 Grace Intl 152 dms (76,616 lbs) (Starfield) Antwerp, 6/26.
ACRYLAMIDE POISONOUS SOLID IMO 6 Order 4,320 bgs (246,097 lbs) (Ever Laurel) Rotterdam, 6/22.
ACRYLAMIDEMETHYLENEBISACRYLAMIDEM Mitsui 80 dms (21,317 lbs) (Ming Glory) Kobe, 6/23.
ACRYLIC & METHACRYLIC ACID RESIN Mobil 80 dms (40,036 lbs) (Ming Glory) Yokohama, 6/23.
ACTIVATED CARBON Degussa 600 bgs (20,964 lbs) (Stuttgart Express) Bremerhaven, 6/24.
AEROSOL HARMLESS Degussa 810 bgs (26,160 lbs) (Dart Continent) Bremerhaven, 6/24.
AGAR AGAR Haarlo Pepper 80 dms (8,700 lbs) (Ever Gather) Osaka, 6/25.
Pier Air Intl 50 bgs (4,440 lbs) (Stuttgart Express) Hamburg, 6/24.
ALKYLAMINE TRIDECYLAMINE Haniel Phoenix Transport 16 btl (0 lbs) (Sea Land Developer) Bremerhaven, 6/24.
ALPHA PHENYLGLYCINE Chemical Dynamics 100 dms (12,215 lbs) (Helde) Rotterdam, 6/24.
ALUMINUM FLUORIDE Sheng Shpg 18 plt (37,829 lbs) (Zim Iberia) Osaka, 6/25.
ALUMINUM OXIDE Treibacher 2,100 bgs (230,642 lbs) (Dart Continent) Dramenhaven, 6/24.
Degussa 6 bks (300,444 lbs) (Zim New York) Barcelona, 6/24.
ALUMINUM PASTE Gardner Ind 180 dms (45,830 lbs) (Sea Land Developer) Rotterdam, 6/24.
SCAC Transport ISI dms (45,476 lbs) (Hokko) Hamburg, 6/24.
ALUMINUM PASTEU S Bronze Powders 70 dms (45,140 lbs) (Starfield) Antwerp, 6/20.
ALUMINUM POTASSIUM SULPHATE American Shpg 726 bgs (40,834 lbs) (Haldo) Rotterdam, 6/24.
ALUMINUM NITRATE ... 2,400 ctn (134,392 lbs) (American Kentucky) Hong Kong, 6/24.
ANTIMONY OXIDE Samincorp 600 bgs (Ever Laurel) Le Havre, 6/22.
ANTIMONY TRIOXIDE ACI Chemicals 34 pkg (78,254 lbs) (American Kentucky) Hong Kong, 6/24.
Plaxcham Intl 1,600 bgs (90,664 lbs) (Ming Glory) Kaohsiung, 6/23.
ASAHI AJI MONOSODIUM GLUTAMATE Fallek Chemical 750 bgs (36,360 lbs) (Ever Gather) Osaka, 6/25.
ATACTIC POLYPROPYLENE Order of Shipper 1,440 bgs (33,120 lbs) (Hanjin Yokohama) Keelung, 6/25.
BALSAM John O Walsh 10 dms (5,600 lbs) (Saint Louis) Haifa, 6/27.
Order 5 dms (2,896 lbs) (Saint Louis) Haifa, 6/27.
BARIUM CARBONATE Cometals 2,720 bgs (151,712 lbs) (American Kentucky) Hong Kong, 6/24.
Murray Brothers 208 dms (24,976 lbs) (Ming Glory) Yokohama, 6/23.
BARIUM FERRITE Magno Ceram 20 cs (60,486 lbs) (Nedlloyd Rouen) Leghorn, 6/24.
BARIUM NITRATE NACO S UN 1 toc (nd 700 bgs (76,043 lbs) (Ever Laurel) Hamburg, 6/22.
BENZALDEHYDE O SODIUM SULFONATE Leschaco 72 ctn (26,528 lbs) (Stuttgart Express) Rotterdam, 6/24.
BENZYL ALCOHOL Metsomet 78 dms (36,628 lbs) (Stuttgart Express) Antwerp, 6/24.
BENZYL ALCOHOL ASPARTAME Cdf Chimie 1 tnk (42,549 lbs) (Stefan Starzynski) Le Havre, 6/25.
BENZYL ALCOHOL PERFUME GRADE Chemical Dynamics 50 dms (22,046 lbs) (Stefan Starzynski) Rotterdam, 6/23.
BENZYL ALCOHOL PHOTO GRADE Chemical Dynamics 76 dms (37,487 lbs) (Stefan Starzynski) Rotterdam, 6/23.
BENZYL ALCOHOL TECHNICAL GRADE Chemical Dynamics 28 dms (12,348 lbs) (Stefan Starzynski) Rotterdam, 6/23.

BENZYL CYANIDE IMCD 6 UNNO 6034 Inter Maritime Fwdg 1 Con (43,761 lbs) (Ever Laurel) Antwerp, 6/22.
BENZYL PARABEN Kenemetsu Oosho 195 dms (23,214 lbs) (Hanjin Yokohama) Kobe, 6/25.
BETA HYDROXYNAPHTHOIC ACID Uono Fine Chemical Ind 1,260 bgs (71,950 lbs) (Hanjin Yokohama) Kobe, 6/25.
BLACK PEPPER A A Sayla 216 bgs (34,046 lbs) (Hoegh Mary) Cochin, 6/26.
A Kazemi 210 bgs (34,116 lbs) (Ever Gather) Singapore, 6/25.
210 bgs (34,116 lbs) (Ever Gather) Singapore, 6/25.
Balfour Guthrie 430 bgs (67,829 lbs) (Hoegh Mary) Cochin, 6/26.
Dmt 1,286 bgs (203,216 lbs) (Hoegh Mery) Cochin, 6/26.
Gel Spice 210 bgs (34,116 lbs) (Ever Gather) Singapore, 6/25.
430 bgs (67,829 lbs) (Hoegh Mary) Cognin, 6/26.
BLACK PEPPER Griffith Laboratories 215 bgs (33,938 lbs) (Hoegh Mary) Cochin, 6/26.
Jantzen & Deeke 2,147 bgs (338,714 lbs) (Hoegh Mary) Cochin, 6/26.
Ludwig Muller 420 bgs (67,500 lbs) (Hoegh Mary) Cochin, 6/26.
Man Producten 429 bgs (67,716 lbs) (Hoegh Mary) Cochin, 6/26.
Reliable Mercantile 429 bgs (67,624 lbs) (Hoegh Mary) Cochin, 6/26.
Tata 17,654 bgs (2,771,982 lbs) (Hoegh Mery) Cochin, 6/26.
DUTVAR AF Order 21 bxs (25,556 lbs) (Sea Land Developer) Rotterdam, 6/24.
2 pcs (25,695 lbs) (Sea Land Developer) Rotterdam, 6/26.
BUTYL LACTATE Fran Oren Shpg 60 dms (39,154 lbs) (Zim Iberia) Yokohama, 6/24.

C-D

CADMIUM PIGMENT Whittaker Clark & Daniels 2 dms (123 lbs) (Atlantic Concert) Liverpool, 6/24.
CAFFEINE ANHYDROUS Amalgamated Metal 200 dms (12,125 lbs) (American Kentucky) Kobe, 6/24.
CALCIUM CARBONATE HAKUENKA CC & B H M Royal 4,796 pkg (246,335 lbs) (American Kentucky) Kobe, 6/24.
CARBON CARBONATE Morimura Brothers 80 ctn (2,796 lbs) (Ming Glory) Yokohama, 6/23.
CASEIN Norsoland Foods 2,340 bgs (128,970 lbs) (Sea Land Developer) Rotterdam, 6/26.
CASSIA CHIPS Parker Trdg 750 bgs (34,460 lbs) (Ever Gather) Kingston, 6/25.
CASSIA OIL Order 73 dms (17,703 lbs) (Ever Gather) Hong Kong, 6/25.
CASSIA OIL NATURAL Citrus & Allied Essences 12 dms (5,900 lbs) (American Kentucky) Hong Kong, 6/24.
CAUSTIC POTASH Rotterdam 1 bks (1,739,103 lbs) (Tonhiro) Antwerp, 6/22.
CAUSTIC POTASH SOLUTION Marathon 78 pkg (26,190 lbs) (Dart Continent) Felixstowe, 6/24.
CAUSTIC SODA Chemserve Terminal 1 bks (12,138,384 lbs) (Tonhiro) Antwerp, 6/22.
DIAPHRAGM GRADE OIL 1 bks (4,930,748 lbs) (Shoun Fujiyama) Tosapori, 7/18.
Norsk Hydro Production 1 bks (3,747,666 lbs) (West-port Clipper) L Avera, 7/13.
FLAKES Icd Group 380 bgs (39,890 lbs) (Ever Laurel) Antwerp, 6/22.
LIQUID MERCURY GRAD ORDER 1 bks (6,485,849 lbs) (Westport Clipper) L Avera, 7/13.
CEDARWOOD OIL CRUDE Exim Line 112 dms (41,679 lbs) (Hanjin Yokohama) Hong Kong, 6/25.
CHEMIGUM P8B A Goodyear Intl 1,080 bxs (77,614 lbs) (Starfield) Le Havre, 6/26.
CHILLI POWDER Gage Foods 120 bgs (13,492 lbs) (Hoegh Mary) Bombay, 6/26.
CHINESE CUMIN SEED A A Sayla 600 bgs (56,217 lbs) (American Kentucky) Kobe, 6/24.
MONOSODIUM GLUTAMATE Summit Imports 366 pkg (38,014 lbs) (Ming Glory) Keelung, 6/23.
CHLORONITROBENZENES ORTHO Ict Consultants 1 tnk (40,565 lbs) (Stefan Starzynski) Rotterdam, 6/23.
CHOLINE BITARTRATE Leyden Customs Expediters 200 dms (23,569 lbs) (Almudena) Bilbao, 6/26.
Semrak Chemical 120 bgs (14,339 lbs) (Atlantic Service) Rotterdam, 6/24.
CHROME OXIDE Charles Kurz 184 dms (38,666 lbs) (American Kentucky) Hong Kong, 6/24.
Chi Mei Metals 340 bgs (36,226 lbs) (American Kentucky) Hong Kong, 6/24.
CITRIC ACID ANHYDROUS GRANULAR 5 Order 3 Con (122,223 lbs) (Ever Laurel) Antwerp, 6/22.
CLOVES Mastrang Trdg 20 cs (2,434 lbs) (Hoegh Mary) Colombo, 6/26.
Philadelphia Intl Bank 24 cs (4,409 lbs) (American Kentucky) Singapore, 6/24.
COBALT Marasco Service 216 dms (126,939 lbs) (Dart Continent) Antwerp, 6/24.
COPPER SULPHATE Don J Fellett 800 bgs (44,445 lbs) (Southern Diamond) Valparaiso, 6/26.
CORIANDER C&M Grandin Link 720 bgs (79,586 lbs) (Atlantic Saga) Le Havre, 6/10.
COUMARIN Order 270 dms (32,024 lbs) (American Kentucky) Kobe, 6/24.
CUMENE General Electric 1 bks (6,782,399 lbs) (Shoun Bontrader) PTO Torres, 7/8.
CYANINE BLUE PIGMENT Leyden Customs Expediters 60 dms (5,704 lbs) (Ming Glory) Kobe, 6/23.
CYCLOHEXYL METHYL CARBINYL BUTYR Bubel 17 dms (7,495 lbs) (Dart Continent) Felixstowe, 6/24.
CYNAMINE BLUE PIGMENTS Leyden Customs Expediters 26 dms (1,543 lbs) (Ming Glory) Kobe, 6/23.
DEXTRINE Order 4,200 bgs (233,800 lbs) (Sea Land Developer) Rotterdam, 6/24.

DIALLYL PHTHALATE MONOMER Alba Fwdg 80 dms (39,330 lbs) (Ever Gather) Osaka, 6/25.
DIANISIDINE DIHYDROCHLORIDE Nagase America 190 dms (31,559 lbs) (Ming Glory) Kobe, 6/23.
DIAZINON ORGANOPHOSPHORUS PESTIC Makhteshim Agan 75 dms (40,013 lbs) (Zim New York) Haifa, 6/26.
DIBUTYL PHTHALATE Sisas 1 bks (374,094 lbs) (Shoun Vanguard) Genoa, 7/2.
DIBUTYLTINOXIDE 818 06 8 Aolma A 0 120 dms (28,043 lbs) (Hanjin Yokohama) Yokohama, 6/25.
DIETHYL 4 OXOPIMELATE 2 5 XYLENO Alba Fwdg 205 dms (14,030 lbs) (Ever Gather) Osaka, 6/25.
DIETHYL MALONATE Kay Fries 76 brl (36,526 lbs) (Ever Laurel) Antwerp, 6/22.
DIMETHYL PHENYLISOCYANATE Max Gruenhut 7 pkg (994 lbs) (Atlantic Saga) Rotterdam, 6/10.
DIMETHYLAMINOPROPYLAMINE Order 2 tnk (78,464 lbs) (Helde) Bremerhaven, 6/24.
DIOCTYL PHTHALATE Sisas 1 bks (817,288 lbs) (Shoun Vanguard) Genoa, 7/2.
DIOXYDE DE TITANE TITAFRANCE ANA Fullex 650 bgs (44,299 lbs) (Ever Laurel) Antwerp, 6/22.
DIPHENYL METHANE 4 4 DIISOCYANAT Bwlt Adhesives 80 dms (36,801 lbs) (Starfield) Le Havre, 6/26.
DODECYL BROMIDE Amerbrom 160 dms (74,075 lbs) (Stefan Starzynski) Rotterdam, 6/23.
DRIED RED CHILLI POWDER Koyeo Intl 550 ctn (18,251 lbs) (Oriental Patriot) Hong Kong, 6/23.
DRIED CHILEAN SEAWEED IRIDAEA Marine Colloids 1,375 bls (234,270 lbs) (Southern Diamond) Valparaiso, 6/26.
DUNDICUT CHILLIES Morris J Golombeck 1,150 bgs (63,636 lbs) (Nedlloyd Rouen) Karachi, 6/24.
Dualty Spice 950 bgs (30,986 lbs) (Nedlloyd Rouen) Karachi, 6/24.

E-H

ETHANOL & ITS SOLUTIONS Star Liquor Imports 2 tnk (78,325 lbs) (Stuttgart Express) Greenock, 6/24.
ETHYL MONOCHLOROACETATE Rhone Poulenc 60 dms (44,819 lbs) (Nedlloyd Rouen) Marseille, 6/24.
ETHYLBUTANOL Order 1 con (35 362 lbs) (Ever Laurel) Hamburg, 6/22.
ETHYLCHLOROGLIQUE A INTERMEDIATES Cosmos Shpg 400 bgs (21,501 lbs) (Ming Glory) Kobe, 6/23.
EUCALYPTUS OIL E L Scott 10 dms (4,707 lbs) (Almudena) Lisbon, 6/26.
EUCALYPTUS OIL EIGHTY PERCENT Bartel Shpg 22 dms (9,846 lbs) (American Kentucky) Hong Kong, 6/24.
Order 80 dms (39,394 lbs) (American Kentucky) Hong Kong, 6/24.
FASTOGEN GREEN & BLUE Alba Fwdg 1,625 bgs (67,247 lbs) (Ming Glory) Yokohama, 6/23.
FATTY ACID Brooks Intl 60 dms (36,272 lbs) (Ming Glory) Keelung, 6/23.
Leyden Customs Expediters 900 bgs (45,496 lbs) (Ever Laurel) Antwerp, 6/22.
FATTY ACID ESTER Gattefosse 250 bxs (12,765 lbs) (Nedlloyd Rouen) Marseille, 6/24.
GAMMA ACID DRY Ceo Gaigy 160 drs (35,715 lbs) (Stuttgart Express) Hamburg, 6/24.
GELATIN D Lugo 400 bgs (22,926 lbs) (Atlantic Concert) Liverpool, 6/24.
GINGER A Kazemi 160 bgs (22,399 lbs) (Hoegh Mary) Cochin, 6/26.
Attari Brothers 320 bgs (44,656 lbs) (Hoegh Mary) Cochin, 6/26.
Schill Food Products 160 bgs (22,320 lbs) (Hoegh Mary) Cochin, 6/26.
GLYCEROL Rhone Poulenc 166 pkg (22,101 lbs) (Atlantic Service) Le Havre, 6/24.
GRAPEFRUIT OIL Herbert Marmorek & Sons 6 dms (3,368 lbs) (Zim New York) Haifa, 6/26.
S Alah 17 dms (7,496 lbs) (Zim New York) Haifa, 6/26.
Ungerer 6 pkg (2,919 lbs) (Zim New York) Haifa, 6/26.
GUM ARABIC Richard Boas 60 bgs (5,595 lbs) (Stuttgart Express) Hamburg, 6/24.
HYDROFLUORIC ACID AG Chemicals 144 dms (77,778 lbs) (Hanjin Yokohama) Kobe, 6/25.
Ampac Chemical 136 dms (73,308 lbs) (Zim Iberia) Osaka, 6/24.
HYDROFLUORIC ACID CORROSIVE MATL Trans World Shpg 218 dms (118,667 lbs) (Ming Glory) Kobe, 6/23.
HYDROLYZED PLANT PROTEIN PWO Natural Nydegger Transport 125 dms (7,855 lbs) (Atlantic Service) Rotterdam, 6/24.
HYDROQUINONE DYE PRODUCT DANGERO Rhone Poulenc 720 bgs (41,072 lbs) (Nedlloyd Rouen) Marseille, 6/24.
HYDROQUINONE PHOTO GRADE Mitsui 720 bgs (41,023 lbs) (Mingo Glory) Kobe, 6/23.

I-M

INDIAN DRIED OSSEIN Order 778 bgs (69,006 lbs) (American Kentucky) Khor Fakkan, 6/24.
INDIAN DRIED OSSEIN SIZE Order 585 bgs (34,502 lbs) (American Kentucky) Khor Fakkan, 6/24.
INOSITOL NF GRANULAR Cargo Transfer 100 dms (11,949 lbs) (Zim Iberia) Yokohama, 6/24.
IRON OXIDE Trans World Shpg 1,440 bgs (80,810 lbs) (Sea Land Developer) Rotterdam, 6/26.
ISOBORNYL ACETATE SDAC Transport 78 dms (37,467 lbs) (Stefan) Rotterdam, 6/24.
ISODECYL ALCOHOL Order of Shipper 1 bks (2,205,166 lbs) (Stephania) Rotterdam, 7/6.
ISOPHYTOL Order 1 Lot (35,176 lbs) (Atlantic Service) Rotterdam, 6/24.
JELUTONG GUM B L J Dreyfus 570 cm (60,494 lbs) (Ever Gather) Singapore, 6/25.
KARAYA GUM Ampak 360 bgs (36,996 lbs) (Hoegh Mary) Bombay, 6/26.
L CYSTEINE HCL ANHYDROUS Andel Products 20 dms (2,351 lbs) (Ming Glory) Kobe, 6/23.
L D POLYETHYLENE Visual Packaging 3 skd (4,259 lbs) (Zim New York) Haifa, 6/26.
L LEUCINE & L ISOLEUCINE Inter Maritime Fwdg 52 dms (3,234 lbs) (Stuttgart Express) Bremerhaven, 6/24.
L PHENYLALANINE Francesco Parfett 25 dms (1,147 lbs) (Starfield) Rotterdam, 6/26.
L TRYPTOPHAN Showa Denko America 20 dms (2,557 lbs) (Oriental Patriot) Kobe, 6/23.
LACTIC ACID Trans Chemic Id 79 dms (36,581 lbs) (Ming Glory) Yokohama, 6/23.
LACTOSE CASEIN American Casein 400 bgs (44,092 lbs) (Helde) Hamburg, 6/24.
LAMPONG BLACK PEPPER Ormi New York 420 bgs (68,236 lbs) (Ever Gather) Singapore, 6/25.
LANOLIN OIL Order 160 dms (78,199 lbs) (Zim Iberia) Osaka, 6/24.
LAURIC ACID 99 PCT FLAKES Robeco Chemicals 1 con (40,792 lbs) (Ever Laurel) Rotterdam, 6/22.
LEAD FLUORIDE Orlek Chemicals 30 cs (3,307 lbs) (Ming Glory) Kobe, 6/23.
LIME OIL Order 10 dms (4,526 lbs) (Southern Diamond) Callao, 6/26.
LINALOOL Order 156 pkg (67,227 lbs) (Atlantic Service) Le Havre, 6/24.

LITSEA CUBEBA OIL Citrus & Allied Essences 30 dms (13,095 lbs) (American Kentucky) Hong Kong, 6/24.
MAGAGASCAR George Uhe 439 bgs (44,160 lbs) (Starfield) Rotterdam, 6/26.
MAGNESIUM OXIDE GRANULAR Rhenset 662 dms (76,810 lbs) (Oriental Patriot) Kobe, 6/23.
MAGNESIUM SULPHATE ANHYDROUS Potash Import & Chemical 600 bgs (60,608 lbs) (Stuttgart Express) Bremerhaven, 6/24.
MALABAR BLACK PEPPER Man Production 430 bgs (67,676 lbs) (American Kentucky) Singapore, 6/24.
MALABAR GARBLED BLACK PEPPER A A Sayla 171 bgs (90,129 lbs) (American Kentucky) Singapore, 6/24.
A Kazemi 215 bgs (33,030 lbs) (American Kentucky) Singapore, 6/24.
Dmt 1,264 bgs (202,074 lbs) (American Kentucky) Singapore, 6/24.
Durkee Famous Food 429 bgs (67,710 lbs) (American Kentucky) Singapore, 6/24.
Durkee Foods 430 bgs (67,875 lbs) (American Kentucky) Singapore, 6/24.
Gel Spice 831 bgs (148,617 lbs) (American Kentucky) Singapore, 6/24.
Griffith Laboratories 215 bgs (33,938 lbs) (American Kentucky) Singapore, 6/24.
Intl Brokers 214 bgs (33,779 lbs) (American Kentucky) Singapore, 6/24.
Jantzen & Deeke 2,342 bgs (369,187 lbs) (American Kentucky) Singapore, 6/24.
Ludwig Mueller 215 bgs (33,938 lbs) (American Kentucky) Singapore, 6/24.
Man Producten 1,071 bgs (169,008 lbs) (American Kentucky) Singapore, 6/24.
Order 428 bgs (67,556 lbs) (American Kentucky) Singapore, 6/24.
Reliable Mercantile 215 bgs (33,936 lbs) (American Kentucky) Singapore, 6/24.
V Berg & Sons 200 bgs (31,526 lbs) (American Kentucky) Singapore, 6/24.
MELAMINE & UREA FORMALDEHYDE MOU Order 929 dms (56261 lbs) (Zim New York) Haifa, 6/26.
MELAMINE MOULDING COMPOUND GRANU Order 520 bgs (45194 lbs) (Zim New York) Haifa, 6/26.
MERCURIC CHLORIDE ACS Troy Chemical 183 dms (14364 lbs) (Hoegh Mary) Bombay 6/26.
METACHLOROANILINE HAZARDOUS Order 20 dms (11693 lbs) (Atlantic Concert) Liverpool, 6/24.
METHANILIC ACID POWDER Olin Chemical 720 bgs (39663 lbs) (Stuttgart Express) Greenock, 6/24.
METHOCARBAMOL HARMLESS Accelerated Shpg 60 dms (7143 lbs) (Stuttgart Express) Greenock, 6/24.
METHYL CELLULOSE Henkel 660 bgs (44615 lbs) (Stefan Starzynski) Rotterdam, 6/23.
METHYL ETHYL KETOXIME John Weidnor 78 dms (35653 lbs) (Stefan Starzynski) Rotterdam, 6/23.
Mitsui 60 dms (37390 lbs) (Ming Glory) Kobe, 6/23.
METHYL ISOBUTYL KETONE Sisas 1 bks (1102267 lbs) (Shoun Vanguard) Genoa, 7/2.
METHYL METHACRYLATE MONOMER IMCO Order 1 con (40765 lbs) (Ever Laurel) Felixstowe, 6/22.
METHYL SALICYLATE Felton Intl 152 dms (67796 lbs) (Bazias 2) Constanza, 6/24.
METHYLCELLULOSE Mitsumi 305 dms (37544 lbs) (Ming Glory) Yokohama, 6/23.
METOL PHOTOGRADE Howard Hall Ind 10 dms (1190 lbs) (Barber Taxas) Yokohama, 6/26.
MONO PENTAERYTHRITOL Recochem 18 bbg (35935 lbs) (Southern Diamond) Valparaiso, 6/26.
1400 bgs (79862 lbs) (Southern Diamond) Valparaiso, 6/26.
MUNTOK WHITE PEPPER Buchanan Trdg 180 bgs (33863 lbs) (Ever Gather) Singapore, 6/25.
Central Indonesian Trdg 180 bgs (33863 lbs) (Ever Gather) Singapore, 6/25.
Gel Spice 120 bgs (22575 lbs) (Ever Gather) Singapore, 6/25.
Ludwig Mueller 910 bgs (33863 lbs) (Ever Gather) Singapore, 6/25.
MUSTARD Richter Brothers 110 ctn (3042 lbs) (Stefan Starzynski) Bremerhaven, 6/23.

N-R

N BUTYL METHACRYLATE FLAMMABLE Degussa 1 tnk (38073 lbs) (Stuttgart Express) Bremerhaven, 6/24.
N BUTYL METHACRYLATE IMCO 3 UN 2 Surface Air Intl 1 con (39374 lbs) (Ever Laurel) Felixstowe, 6/22.
N BUTYL METHACRYLATE MEHQ 15 WC Surface Air Intl 1 con (39110 lbs) (Ever Laurel) Felixstowe, 6/22.
N BUTYL METHACRYLATE MONOMER MEH Order 1 con (39863 lbs) (Ever Laurel) Felixstowe, 6/22.
N METHYL PYRIDINIUM SULFATE Max Gruenhut 4 dms (1060 lbs) (Atlantic Service) Rotterdam, 6/24.
NICOTINAMIDE FEEDGRADE Reilly Tar & Chemical 100 bgs (44821 lbs) (Stuttgart Express) Antwerp, 6/24.
Reilly Tar & Chemical 20 plt (37487 lbs) (Stuttgart Express) Antwerp, 6/24.
NIGROSINE WATER SOLUBLE CRYSTAL Order 20 dms (2432 lbs) (Hoegh Mary) Calcutta, 6/26.
NITRITE DE SOUDE SODIUM NITRITE Rhone Poulenc 720 bgs (61570 lbs) (Ever Laurel) Antwerp, 6/22.
O CHLOROPYRAZOLONE Order 18 csk (0 lbs) (Ever Gather) Kaohsiung, 6/25.
ORGANOPHOSPHORUS Rhone Poulenc 1 cs (2 lbs) (Atlantic Service) LeHavre, 6/24.
ORTHO DICHLOROBENZENE Ortho Rocham Trdg 4 dms (1817 lbs) (Starfield) Rotterdam, 6/26.
ORTHO PARA TOLUENE SULFONAMIDE Taub Hummel & Schnall 120 dms (35048 lbs) (Hanjin Yokohama) Busan, 6/25.
OXALIC ACID F W Myers 720 bgs (39029 lbs) (Hanjin Yokohama) Keelung, 6/25.
OXIDIBING SUBSTANCE Autotype 10 cs (132 lbs) (Atlantic Concert) Liverpool, 6/24.
P ACETANISIDINE Penson 400 dms (50265 lbs) (American Kentucky) Kobe, 6/24.
P HYDROXYBENZALDEHYDE Chemical Dynamics 30 dms (3770 lbs) (Ming Glory) Yokohama, 6/23.
P TOLUENE SULFONIC ACID O J Ambrosio 600 bgs (58283 lbs) (Ming Glory) Yokohama, 6/23.
PAPRIKA John H Elton 330 bgs (36405 lbs) (Nedlloyd Rouen) Valencia, 6/24.
PARA CHLORO ORTHO NITROANILINE Bemo Shpg 110 dms (14711 lbs) (Ming Glory) Kobe, 6/23.
PARA CRESIDINE FUSED INTERMEDIAT Order 78 dms (36238 lbs) (Ming Glory) Kobe, 6/23.
PARA MONOCHLORPHENOL Rhone Poulenc 87 dms (40029 lbs) (Nedlloyd Rouen) Marseille, 6/24.
PARA TERTIARY BUTYL BENZALDEHYDE American Container Lines 80 dms (8903 lbs) (Hanjin Yokohama) Keelung, 6/25.
PARA TOLUENE SULFONAMIDE Taub Hummel & Schnall 1600 bgs (71988 lbs) (Hanjin Yokohama) Busan, 6/25.
PARAFFIN WAX Dura Commodities 724 pkg (41098 lbs) (Dart Continent) Felixstowe, 6/24.
PENICILLIN G PROCAINE Helm New York Chemical 168 dms (12426 lbs) (Dart Continent) Felixstowe, 6/24.

Continued on Page 49

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(1) 6000 gal. SS reactor 70/175 psi, ½ pipe coil jkt.

48"x 24" TOLHURST SS "BATCHAMATIC" CENTRIFUGE COMPLETE LATE MODEL STILL INSTALLED (6)
75 HP BIRD CS HORIZ. SOLID BOWL CENTRIFUGE (4)
33'x 20' WESTERN PREC. SS TYPE 16-3320-12 CONVEYER, DRYER/CRYSTALLIZER
(2) 1200 TONS CARRIER CHILLER SYSTEM
2 LATE MODEL 6'x 61' RENNENBERG 304 SS ROTARY DRYERS COMPLETE
NASH VACUUM PUMP SYSTEM MDL. CL 3001 AND MDL. 9001 COMPLETE WITH MOTOR & ACCESSORIES
5 CU. FT. DBL. CONE SS VACUUM DRYER
10,000 TON/YEAR MALEIC ANHYDRIDE PLANT
2 DRAIS 30 HP BAND MILLS
12"x 30"& 24"x 38"SS S/B CENTRIFUGE
2 SS NIAGARA 42-310-22 VERT. LEAF FILTERS
CUMBERLAND PELLETIZERS 6"& 6"(7)
FPI GRANULATOR MODEL 79, 3HP (5)
30 CU. FT. 316 SS DBL. CONE VAC. DRYER
36 SQ. FT. LUWA THIN FILM EVAPORATOR

10,000 GAL. HAST C TANK, AGITATED, 60 PSI
6,500 GAL. INCONEL REACTOR, 60 PSI, AGIT.
2,000 GAL. 316SS REACTOR, 1000/100 psi
1,300 GAL. 316SS REACTOR, 150 FV/125 PSI

4000, 5000, 6000 GAL. AGITATED REACTORS VERY ATTRACTIVE PRICES

SPECIALTY CHEMICAL LIQUIDATION

1,000 GAL. G/L REACTOR, 90FV/105, TW DR. MECH. SEAL
750 GAL. GL/JHT. V.REACTOR, 100FV/90 PSI
500 GAL. RA SERIES G/L REACTOR TW DR/MECH.SEAL(3)
500 GAL. SERIES EL,G/L REACTOR, 100/95 PSI, TW DR.
300 GAL. SERIES EL,G/L REACTOR, 100/95 PSI,(5)
200 GAL. SERIES EM,G/L REACTOR, 50/90 PSI(4)
8,000 GAL. HORIZ. G/L STORAGE TANK, 2 COMPARTMENTS
2,000 GAL. PFAUD. HORIZ. G/L BROMINE STORAGE TANK
1,000 GAL. PFAUD. SERIES XL, G/L TANK 75FV/90 JKT.
500 GAL. PFAUD. VERT. G/L JHT. TANK, 40FV/55 JHT.
200 GAL. G/L RECEIVER, 25 PSI INT. (4)
100 GAL. GLASCOTE G/L RECEIVER (3)
50 GAL. GLASS LINED RECEIVER, 24" DIA.X24" (4)
26 SQ.FT. PFAUD. G/L THIMBLE CONDENSER 35/100PSI (4)
48"X30" SHARPLES 316SS, MDL. T1600 CENTRIFUGE
30 TON FRICK REFRIGERATION COMPRESSOR, COMPLETE
24" SPERRY, SS FILTER PRESS, 2 EYE18 CHAMBERS
18" SPERRY, SS FILTER PRESS, 2 EYE15 CHAMBERS
277 SQ.FT. GRAPHITE "POLYBLOCH" HT. EXCHANGER, 125 PSI
198 SQ.FT. GRAPHITE "POLYBLOCH" HT. EXCHANGER, 100 PSI
FITZPATRICH MDL. D-6 FITZMILL, SS
300 GAL. SS REACTOR TW DR. MECH. SEAL
300 GAL. SS VERT. TANK, 40"X48" (2)
EQUIPMENT STILL INSTALLED!

HEAT EXCHANGERS

SQ.FT.	MATERIAL	SQ.FT	MATERIAL
14,615(UNUSED)	TITANIUM	1,600(UNUSED)	304SS/304SS
12,250(UNUSED)	CS/304LSS (3)	1166	TITANIUM
9,134	304SS/304SS	1,024(UNUSED)	SS/PLATE (2) TITANIUM
9,210	CS/304SS	893	
7,775(UNUSED)	304LSS (6)	785(UNUSED)	CS/304LSS
4,840(UNUSED)	CS/304LSS	609	304SS/304SS
3,600(UNUSED)	GRAPHITE	589(UNUSED)	CS/304LSS (2)
3,489(UNUSED)	304LSS	481(UNUSED)	CS/304SS
2,721	C/S GRAPH	482(UNUSED)	CS/304LSS
2384	TITANIUM	308(UNUSED)	CS/304LSS
2200(PLATE)	TITANIUM (2)	292(UNUSED)	CS/SS (5)
2,000	304/304SS	275	316SS/316SS
1612	TITANIUM	206(UNUSED)	SS/SS

VARIOUS GRADES OF STAINLESS STEEL AVAILABLE UP TO 24,000 SQ.FT. MANY UNUSED, ALL MATERIALS & PRESSURES

WE WANT TO BUY YOUR SURPLUS EQUIPMENT/ PROCESS UNITS/ COMPLETE PLANTS

COMPLETE PLANT SITE FOR SALE!

Former Synthetic Gas Plant. 60 acres of land, 75,000 sq. ft. of building built in mid 70's. Complete with all improvements including rail and pipe line transmission. We will sell entire facility or individual pieces of equipment. Major pieces are:

(2) 7.2 million cu. ft. per day hydrogen plant
(4) 150,000 LB/HR 620 psi Boilers complete with Demineralizer systems
(2) 2500 KVA Generators
Emergency Turbine Generator Solar Centaur 3700 HP complete
100's of Heat exchangers-CS and SS up to 15,000 sq. ft.
100's of Pumps and Compressors
100's of Tanks - both atmospheric and pressure

CALL FOR DETAILS!

19,000 GAL. 316 SS FERMENTATION SYSTEM

CENTRIFUGES

BASKET
48"x30" Sharples 316 mdl. T1600 (3)
48"x30" Tolhurst Hast. C Auto (3)
48"X24", 316SS, Automatic, W/plow

PUSHER TYPE
Bird-Escher Wyss, 316SS, Mdl. P500, 20", UNUSED
DeLaval, 25", 2-Stages, 316SS

DISC/BOWL
DeLaval, Mdl. SRPX-309, SS, vert., & Mdl. SAF 50,SS
Westphalia 304 SS Mdl. SAMN-5036
Delaval, 25", 2-Stages, 316 SS

SOLID BOWLS
Sharples, Mdl. P1000, P3000, P5000, P5400, (2), PY 414 SS
Bird, 40"X60", 36"X72", 32"X50", 24"X38", 18"X42', 18'x28" SS
Podbielniak Mdl. 6000 comp. w/controls

VACUUM DRYERS
325 cu.ft. Abbe, 304 SS dbl. cone
200 cu.ft. 316SS, 6'6"x11'6", rotary
164 cu. ft. Devine 304 SS dbl. cone
164 cu.ft. Paterson "Conaform," 316SS Dbl. cone
150 cu. ft. SS Twin Shell
150 cu.ft. SS, & 150 cu.ft. Nickel clad
125 cu.ft. SS & CS, 4'x14', 105/90/150 psi
125 & 83 cu. ft. Buflovak SS Rotary
60 cu.ft. Paterson Kelly, SS, dbl. cone
40, 30 & 20 cu.ft. Stokes, SS rotary (4)
30 cu.ft. Pfaudler G/L dbl. cone vacuum

WE RENT/LEASE & SELL CHILLERS

GLASS * GLASS * GLASS REACTORS

3,000 GAL. DEDIETRICH, 100/90, PHILA. DRIVE
3,000 GAL. RA SERIES, 100/90 TW, REGLASSED
2,000 GAL. RA SERIES, 100/90 TW, REGLASSED
1,000 GAL. RA SERIES, 100/90 TW, REGLASSED
1,000 GAL. E SERIES 25/90 (4)
750 GAL. 25/90 TW, (2)
500 GAL. RA SERIES, 100/90, TW
400 GAL. E, SERIES, 25/90, TW
300 GAL. E, SERIES, 25/90, TW
200 GAL. E, SERIES, 25/90 REGLASSED, TW
100 GAL. E, SERIES, 25/90, TW

OVER 100 GLASS LINED REACTORS IN STOCK

GLASS LINED TANKS

FROM 5-22,000 GALLONS
TRAILER LOADS OF GLASS LINED PARTS AVAILABLE

* LOU FALCONE-OUR G/L SPECIALIST WITH 21 YRS. EXPERIENCE IS HERE TO HELP YOU! *

FILTERS

12'X16' "EIMCOBELT" ROTARY VAC. FILTER SYSTEMS (2)
8'X20' EIMCO, 316SS, HORIZ. VAC. BELT EXTRACTOR
5'X14' EIMCO, 316LSS, PRECOAT ROTARY VAC. FILTER
8'X12' AMETEK, 316SS, ROTARY VAC. FILTER, 300 SQ.FT.
5'X8'6 AMETEK, 316SS, ROTARY VAC. FILTER, 137 SQ.FT.
5'X21' EIMCO POLYPRO EXTRACTOR SETTLERS (3)
4'X20' ST.LINE HORIZ. VAC. BELT FILTER SYSTEM
12"x 13' EIMCO H. BELT EXTRACTOR
48" SHRIVER ALP POLYPRO CGR FILTER PRESS, 57 CHAMBERS
48" POLYPRO REC. P/F AUTO FILTER PRESS
42" DURCO QUADRAPRESS MDL. QPF-42/20-65, POLYPRO

DUST COLLECTORS

SS & CS, PULSE JET AND SHAKER TYPE
400-112,000 SQ.FT.

WE HAVE OVER 700 SS TANKS IN STOCK

CALL NOW ABOUT GIANT RHODE ISLAND & NEW JERSEY LIQUIDATION ALL EQUIPMENT STILL INSTALLED

(89) Glass lined & SS Reactor systems complete with condensers, receivers and control panels. from 50 gal. to 4000 gal.

(40) Filter Presses polypro & SS from 18" to 56" plate and frame recessed plates.

(25) Vacuum dryer systems complete with condensers, vacuum pumps & receivers.
Double Cone: glass & SS.
Rotary 316 SS vacuum dryers
Vacuum Shelf SS and Heresite

(18) Centrifuges 316 SS automatic basket centrifuges complete with ... and nitrogen purge
Scrubber systems/Vacuum systems/Glass lined and SS tanks
MUCH MORE!!!

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COMPLETE PLANT AVAILABLE FOR SALE

AMMONIA	SOY BEAN
200 TPD	900TPD
300 TPD	
700 TPD	UREA
NITRIC ACID	220 TPD
120 TPD	
130 TPD	SHIP WASHING
150 TPD	6100 CU. FT. HR
250 TPD	
760 TPD	
AMMONIUM NITRATE	ETHONAL
450 TPY	2MMGPY
550 TPD	

ATTRACTIVELY PRICED

1 - Approx. 51 Sq. Ft., Pfaudler, Wiped Film Evapor. 316 SS wetted parts ASME Coded,. Jacket rated 100 psi w/Internal vacuum. Complete w/flange mounted motor to Pfaudler TW drive w/- mechanical seal, lubricator & integral heat exchanger.
Call today for more details.

EQUIPMENT WANTED

GOOD, USED, CHEMICAL, PHARMACEUTICAL & RELATED EQUIPMENT - CENTRIFUGES, DRYERS, FILTERS, REACTORS, TANKS ETC.
WE WILL PURCHASE INDIVIDUAL ITEMS OR COMPLETE PLANTS.
CALL OUR OFFICE TODAY. TOP DOLLARS PAID. NO DEAL TOO BIG OR TOO SMALL.

DRYERS

Drum Dryers/Flakers
(1) 24" dia. x 36" Buflovac SS dble. drum dryer
(2) 32" dia.x 108" Blaw Knox CI dble. drum dryer
(1) 32"dia. x 17'6" Sandvik SS belt flaker
(1) 36"dia.x 10' Buflovak CI dble. drum dryer
(3) 42"dia.x120"Blaw Knox CI dble. drum dryer
(1) 48"dia.x 28" drum flaker, chrome plated drum
(1) 48"dia.x 40" CI flaker, mfg. by Buffalo Foundery
(1) 48"dia.x 40 drum flaker, nickel plated drum, mfg. Blaw-Knox

Fluid Bed
(1) 50 Hg. Aeromatic, Batch, 8'x9', 86,000
(1) 100 Kg. Aeromatic Model ST 100, sanitary SS
(1) Fitzpatrick Model FA 250, SS, 20 HP XP

Holoflite
(1) Western Precipitation Model P8OSSO-A, twin screw, 12" dia. x 20' long, SS constr., jckt. rated 15 psi, complete with 7.5 HP vari-speed drive.
(1) New/Never-Used Joy Processor, CS, single screw, 16"x18' long, rated 110 psi @ 340° F., sprocket & chain drive by 1.5 HP varispeed drive.

Rotary Vacuum
(1) 200 Cu. Ft. Stokes, SS constr., complt.
(2) 165 Cu. Ft. Pfaudler, Double Cone, G/L, 30 & FV/50 psi jktd., 15 HP vari-drive
(1) 150 Cu. Ft. Blaw Knox, Nickel
(2) 132 Cu. Ft. Stokes, Nickel
(1) 72 Cu. Ft. Blaw Knox, SS
(1) 60 Cu. Ft. Titanium Double Cone
(1) 50 Cu. Ft. Gemco, 316SS sanitary, double cone
(1) 37.8 Sq. Ft. Horiz. Thin Film, vac. int. & 150 psig, 304/316SS
(1) 30 Cu. Ft. P-K Twin Shell, 304SS
(1) 20 Cu. Ft. Abbe Twin Cone, 304SS

Spray
(1) 30"x3' Bowen Laboratory w/3' cone bottom, SS constr., w/centrifugal atomizer, 3. HP blower & motor.(1)
(1) Niro lab size 32"diax2'w/2'cone w/centrif. atomizer SS contacts
(1) 7'10" Dia. Anhydro Complete System, sanitary SS
(1) 16' dia. Bowen complt. system SS contacts, new 1978

EVAPORATORS

(1) 1 Sq. Ft. Artisan "Kontro" Ajust-O-Film sys., 316SS
(1) 1.4 Sq. Ft. Luwa Wiped Film, 316SS, 1.5 HP
(1) 1.4 sq. Ft. Luwa thin film SS
(1) 2.5 Sq. Ft. Rodney Hunt Turbo Film 347 SS
(1) 5.4 sq. Ft. Luwa filmtruder, 316 LSS
(1) 6.54 Sq. Ft. Votator Evaporator System, 316 SS contacts, 15 psi & FV & int., 180 psi jkt.
(1) 8.7 Sq. Ft. Rodney Hunt Turbo-Film, 304 SS contact parts, 15 psi & FV/180 psi jckt.
(1) 10.8 Sq. Ft. Luwa SS Wiped Film Evap. System, 15/550 psi
(1) 19.5 Sq. Ft. Votator Turba-Film, 304 Sanit. SS FV/150 psi 10HP
(1) 20 Sq. Ft. Kontro Horiz, Adjust-O-Film, 316ELC, 50 psig, 15 HP
(1) Approx 31 Sq. ft. Vert., Turbo-Film Processor, 304 SS Contacts
(1) Like New 37.8 Sq. Ft. Luwa Horiz. Thin-Film Dryer, 304/316L SS
(1) 40 Sq. Ft. Kontro Adjust-O-Film, SS constr., 20 HP
(1) 47 Sq. Ft. Artisan rising Film, Hast. "C"
(1) Approx 51 sq. ft. Pfaudler Wiped film, 316 SS, 100/65 & FV
(1) 80 Sq. Ft. Kontro Wiped Film Syst., SS constr., FV/150 psi, 40 HP
(1) UNUSED 86 sq. ft. Luwa thin film dryer horiz. 316 L wetted parts, FV int., 150 psi sat steam jkt.
(1) 141 Sq. Ft. Rodney Hunt Turbo-Film, 316 SS 15 psi int., 35 psi jkt 40 HP XP

●●●TANKS-ALL TYPES & SIZES

BLENDERS

600 Cu. Ft. jktd. Dbl.Rbn., CS
Approx. 450 Cu. Ft. CS, 75HP
UNUSED 450 Cu. Ft. Marion Paddle, CS, 75 HP
300 Cu. Ft. CS Dbl. Cone, 30 HP
200 Cu. Ft. KS 316SS Dbl. Cone
175 Cu. Ft. P-K Twin Shell, 316SS
69.3 Cu. Ft. CS Dbl. Cone, 7.5 HP
63 Cu. Ft. Marion Paddle, CS
60 Cu. Ft. 304 SS P-K, Twin Shell, w/int. bar
60 Cu. Ft. Gemco Dbl. Cone, 304SS
30 Cu. Ft. P-K, 304 SS, W/liq. bar.
20 Cu. Ft. P-K, Twin shell, SS
16 Cu. Ft. Robinson Dbl. Rbn. CS
15 Cu. Ft. WG Marion SS
10 Cu. Ft. Gemco dbl. cone, CS, 1½HP
10 Cu. Ft. P-K Sanit Twin Shell 1½HP
10 Cu. Ft. Howes, CS, Dbl. Rbn.
8 Cu. Ft., SS, Dbl. Cone W/liquid-solids bar
2 Cu. Ft. P-K Twin Shell, SS Constr., w/pin int. bar
10" P-K zig zag

FILTERS

Pressure Leaf
1-562 Sq. Ft., 316ELC, Hercules, 28 leaves
1-512 Sq. Ft., 316SS, Niagara, 21 leaves
1-400 Sq. Ft. R/L Sparkler
1-327 Sq. Ft., 304SS, Ind. Filter, 11 leaves
1-320 Sq. Ft. Durco 316 SS, 11 Leaves
1-259 Sq. Ft. Pronto Mdl. #3259, 75 psig
1-Approx. 206 Sq. Ft., SS, Sparkler, Horiz.
1-200 Sq. Ft., SS, Hercules, Horiz.
1-191 Sq. Ft. Enzinger, SS, Vert., 75 psi
1 - 157.64 sq. Ft. Sparkler model 55-S-28, 316SS
1-150 Sq. Ft. Horiz., 12 Vert. Leaf 316SS
1-135 Sq. Ft. Ni, Bowser, Vert.
1-35 Sq. Ft. Hercules Model 5, 316 SS, horiz. tank vert leaves 50 psi

Rotary Vacuum
1-58.5 Sq. Ft. KS, Inconel 600
2-56.5 Sq. Ft. K-S, 316SS, flexibelt disch.
1-87.82 Sq. Ft. Feinc, SS wetted parts, spring disch., 56" dia. x 6' face drum
1-132 Sq. Ft. Dorr Oliver, 304SS, maxibelt disch.
1-200 Sq. Ft. Eimco, 316SS, 8'xS'
4-250 Sq. Ft. D.O. 316L SS Precoat, 8" x10', sanit
1-250 Sq. Ft. K-S 316SS, coil disch.
1-300 Sq. Ft. Eimco, 316SS wetted parts, precoat type w/knife disch., 10" dia. x 10' drum, complt. w/control panel & aux. equipment
1-314 Sq. Ft. Eimco, precoat disch., 316SS
1-400 Sq. Ft. Eimco, CS, Precoat
1-500 Sq. Ft. Eimco, 316SS, belt disch.
1-3'x1' 316SS, knife disch.
1-3'x1' Dorr Oliver, FRP w/receiver & Nash H4 vac. pump, 10 HP
1-3'x 1' K-S comp. sys., 316 SS Flexbelt disch

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REACTORS

Glass Lined
4,000 Gal. Pfaudler, 100/90 psi, TW
1,000 Gal. Pfaudler, 100&FV/90 psi, 4RW
1,000 Gal. Pfaudler, RA60 Series, 100& FV/90 psi, 4DW
1,000 Gal. Pfaudler, RA60 Series, 100& FV/90 psi, 4TW
800 Gal. SS clad, 60/60 psi
750 gal. DeDietrick, Phila drive
800 Gal. Pfaudler, 100&FV/55 psi, BH drive
500 Gal. Pfaudler E-series, 4 TW Drive
75 Gal. Pfaudler, 25 & FV/55 psi, 2 HP
50 Gal. Pfauder Body-UNUSED, 25 FV/-100psi

*Partial Listing - Much More Inventory Glass Lined Storage Tanks & Parts also Available.

Stainless Steel
4,000 Gal. 316SS, Atmos./50 psi, withcoils
3,000 Gal. 347SS Blaw Knox, 150/50 psi
2,500 Gal. 316L SS, 75/75 psi, 150 psi int. coils
2000 Gal. Nooter Autoclave, 316L 2000 psi, FV int. coils
2,000 Gal. Dusenberg, 316 SS, 15/35 & FV int., 50 psi jkt.
1,750 Gal. 316SS Nolla, 1497/50 psi
1,500 Gal. 304SS, 10 HP Lightnin
1,000 Gal. 304SS, 250/80 psi
1,000 Gal. 316SS, 50/75 psi jkt
750 Gal. 316SS, 75 & FV/50 psi
750 Gal. 304SS, 50/60 psi
600 Gal. 316SS, 3000psi, 10 HP
600 Gal. SS, 50 psi, 1.5 HP XP
500 Gal. 316SS, 55 & FV/55 psi
100 Gal. 316SS, 15/50 psi
100 Gal. 316ELC SS, 500/90 psi

★★★ SPECIAL OFFER ★★★
1-UNUSED, never installed Krauss Maffei Turbo Tray Dryer, 29 trays, 9' 9"dia., 316 L SS, all other wetted parts 316 SS, complete unit.
PRICED TO SELL

CENTRIFUGES

(1) Delavel SRPX 309, SS, 20HP
(1) Unused Model B-10 Podbielniak, Alloy 20
(1) Sharples AS-26, SS
(2) Sharples AS-16P, 316SS
(1) Alfa-Laval SS Decanter, Horiz., Mdl. NX314
(2) Dorr Oliver Mdl. CH30 CBU "Merco," 316SS contacts, 150 HP
(1) Baker Perkins S-62 "Pusher Type," SS, 50 HP
(1) Bird 18" x 28", 316 ELC, contour bowl.
(2) Bird 24"x38", 316SS, 40 HP
(3) Sharples P-3000, 316SS, 30 HP
(1) Sharples P-1000, SS 20HP
(1) Unused Bird 36 x96, 317L SS
(1) Tolhurst 48" x 24" perf. basket, 316SS sanitary, auto. plow & discharge, rated 85 #/cu. ft. @ 900 RPM, 20 HP XP.
(1) Tolhurst 48" x 24" Batchmaster, 316SS, perf. basket, w/hydr. plow & 20 HP hydr. drive
(1) Tolhurst 48"x24" Batchmaster, rubber lined, perf. basket, w/hydr. plow & 20HP hydr. drive
(2) Tolhurst 48" x 24" Batchmaster, Heresite lined, perf. basket, w/hydr. plow & 20 HP hydr. drive
(1) Western states 48"x 24", 316 SS
(1) Fletcher 48"x 28" Suspended type, SS perf. basket, 20/10 HP
(1) Sharples Tornado 48" x 30", 316SS, perf. basket, 40 HP XP
(1) Alfa Laval Model MAPX 210 T24, SS wetted parts
(2) Sharples C-27, 316 SS, wetted parts, 40 HP
(1) Sharples C-20, Super-D-Hydrator, SS, 30 HP
(1) Dorr Oliver Merco Screener Model C-400 x2, all SS, twin screw disch., 10 HP

PARTIAL LISTING ONLY

RECENT PURCHASES

Propane Storage System
120,000 gal. Capacity Propane Storage System consisting of 2-60,000 Gal. Propane Tanks, Compressors, Pumps...

400 gal. G/L Pfaudler ...

Alfa-Laval Centrifuge, Model NX214/314.
... CS, Ammonia Storage ...

MANY MORE ITEMS IN STOCK-CALL IDM TODAY!

MIXERS

4.5 Gal. Kneader Master Cont., SS w/jkt.
5 Gal. AMK 304SS Jcktd. Kneader Extruder
18 Gal. W.C. Readco Sigma Blade Dbl. arm
25 gal. Readco DBL/Arm Sigma Blade jktd. SS construction 15 H.P.
60 Gal. Hockmeyer Pony, SS contacts, 7.5 HP varispeed
100 Gal., SS, Sigma Blade, Jcktd. 40 HP
200 gal. W-P CS dble arm Sigma blade, 20 HP
250 gal. AMK Kneader Extruder, Sigma Blades, CS construc, 40 psig, trough jkt.
500 Gal. S-W Rubber Cement, CS, 2-10 HP motors (2)
Unused 1000 Gal. Sanitary 316SS B-K Dbl. Motion Change Can, 100&FV/165 PSI, 125HP
Littleford Model FKM-2000, SS, w/choppers
Littleford Model FM 100 Sanit. SS w/choppers
Prodex Henchel 3.5 Cu. Ft. Mdl. SS J SS, SS Const.
7 Cu. Ft. 304SS Nauta Model MBX-70
10.6 Cu. Ft. Nauta D-10...
... Hockmeyer Hi Speed Disperser
Welding Eng. Model 2FV1V2S Twin screw Extruder, SS, Contacts, 150 psi

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UNUSED CENTRIFUGES

21593-Sharples P5400 Sanitary Centrifuges w/200 HP motor, 25 HP backdrive, gearbox, 5" pitch conveyor, CIP, control panel (2) LATE MODEL

CALL: Ken Kyte (312) 350-2200

CENTRIFUGES

20827-Bird, 18"x24" steel, conical bowl.
20826-Bird, 24"x38" steel, con. bowl, gearbox.
20819-Bird, 24"x38", S/S, 15 degree, contour bowl.
20684-Bird 24"x60", H series, steel w/motor.
20364-Bird 32"x50", SS T316 contour, 75HP.
12863-Bird 36"x96" contour, 10 deg., T317 ELC.
20137-Alfa Laval, NX 418-B31-80, 316SS, gearbox.
17308-Dorr Oliver, 304SS, Merco mdl. 16L, 30 HP.
13565-Sharples, mdl. P 600, gearbox, motor.
16767-Unused Sharples, 3 phase, P3000, S/S, carbide.
20407-Sharples P2000 318SS, 20 HP drive motor.
21359-Sharples P3000 w/gearbox.
20866-Sharples P3000, 52:1 gearbox, S/S casting.
21725-Sharples, P3400, S/S, gearbox & motor.
19249-Sharples, P5400, 316/317SS, 200 HP, gearbox.

LARGE QUANTITY PRESSURE TANKS

Used 30,000 gal. Propane Tanks 9' dia. x 62' lg., dish heads 200 psi ASME. (46)
Used 15,000 gal. Butane Tanks 9' dia. x 31' lg., dish heads, pressure rated. (33)

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Call: (312) 350-2200

REACTORS

20252-Unused Reactor, 600 gal., 304SS dimple jktd.
10138-Pfaudler, 800 gal., T-316 L SS, 55 PSI int/150 PSI.
20909-Brighton reactor, 2000 gal., 316L SS, full dimpl. jkt.
20928-Brighton, 4000 gal., 6' dia. x 10', 316 ELC S/S
20456-Reactor, 4,000 gal., 318 S/S, 8' dia. x 7'9" st. side.
15475-Brighton, 4000 gal., 316SS, vacuum.
20267-GH Hicks, 4000 gal., 316 SS, pipe coil jkt.
20923-Richmnd Eng. Reactor, 4600 gal., T316 stein/clad.
Pfaudler 10,000 gal. reactors T316L, 100 psi int, 180 psi
Pfaudler 15,000 gal. reactor T316L, 100 psi int., 200 psi jkt.,

TANKS-S/S

21131-Tank, 950 gal., T304SS, 5'x8' dish bot., flat top, agit.
21283-Tank, S/S vert., 1200 gal., 6' dia.x6', flat top & bot.
17474-1000 gal., T316SS, 54" dia.x6'8", 3 HP agitator.
20851-Tank, SS, 9000 gal., agit., 12' dia. x 14'6" H.
20655-Tank, SS, 12000 gal., 12' dia. x 14', flat bottom, open top.
17043-Jos Oat horz. tank, 304SS, 16,000 gal., 12'6" dia. x 22'9½" long, 10 PSI.

DUST COLLECTORS

21125-Fabri-Jet jdl SQ9-48 bin vent, 42 sq. ft.
16398-Mikro dust collector, S/S, 63 sq. ft., mdl. 9-8-100, pulse jet.
21153-EVO, bin vent, 72 sq. ft., S/S, 5 HP
20253-Unused EVO pulse jet collector, mdl. 84BF009C, 80 sq. ft.
21192-JH Day mdl. RJ-16RJ36, 128 sq. ft., CS, 3 HP.
21222-Fabri-Jet, mdl. SQ16-80, 181 sq. ft.
20396-Pulse jet collector, "FlexKleen," mdl. 58CT24 AV II w/175 sq. ft., cloth, C.S.
21266-Mikro dust collector, 285 sq. ft., S/S.
20256-Unused EVO Corp. pulse jet dust collector, mdl. 89BF030C, 350 sq. ft.
20255-Unused EVO Corp. dust collector, shaker type, mdl. MS046C 10, 875 sq. ft.

SCREENS

21203-Sprout Waldron sifter, 810, 6 decks.
21150-Sprout Waldron, 010, 1 HP, 10 decks, S/S cont.
21167-Sprout Waldron, 010, 2HP, 10 decks, S/S cont.

NEW ITEMS:

22005-Littleford mod. FKM2000E, 43 cu. ft., S/S.
21093 Nauta MBX 980 Mixer, ST, on weigh scales
21094 Nauta MBX 1410 Mixer, ST, on scales, w/drives.
20831-Pattenmeir, 3.5 cu. ft. mixer, S/S, jkt., 2-speed.
21869-Joy mod. WN 112 air compressor.
21856-Perry DJP, 1600 gal. reactor, T316SS agit.
21867-Pfaudler 300 gal. reactor G/L.
21865-Patterson Paste mixer, 750 gal., C/S, 60 HP. (7)
21850-Sharples P3000, D-Canter, T316.
21796-Sharples P5400, D-Canter, T318 w/gearbox, tiles, 125 HP (2)
21799-Buss 1481 sq. ft., rotary vac dryer.
21803-Henschel 3.5 cu. ft., S/S mixer.
21788-Baker Perkins Lab Mixer, 8 gal. jkt., 2 HP, disp. blade.
21786-Bird 24"x60" centrifuge, S/S, standard. (2)
21804-JH Day ribbon blender, 5 cu. ft., S/S, 80 psi jkt.
21805-Strong Scott ribbon blender, S/S, 21 cu. ft. 5HP.
21807-Cumberland Grinder, mod. 30, w/hopper
21806-Henschel Mixer, mod. 250JSS, 25 cu. ft. S/S bowl.
21816-Pfaudler Tank, 316SS vert., 12000 gal.

FILTER-ROTARY VAC.

15628-FE, Inc. 36" dia.x12", S/S, string disc., 1/2 HP.
17477-FE, Inc., 3' dia x 5', T316SS, belt disc., vac pump.
11177-Dorr Oliver S/S, 6' dia. x 6'L.
11653-Oliver T-316SS, precoat 5'3"x6'.
19226-Elmco valveless precoat, 6' dia. x 6' face, S/S drum.
19431-K.S. flexbelt, 8' dia. x 6' face, 316SS.
18392-Eimco belt filter, 8'x10', steel drum, w/Nash pumps.
15827-Ametek, 8' dia.x14'0" face, maxi-belt, S/S.
17936-Eimco, 316SS, 10' dia. x 14', knife discharge.
17283-Impco belt filter, 12' dia. x 12', 304SS, Nash vacuum pump.
20251-K.S. T304, vacuum filter, 12' dia x 14', 304SS, flexibelt.
20323-Dorr Oliver 11'8"x16' face, S/S cont. parts.
11466-Eimco 10'x10' rotary vac. filter.

DRYER-ROTARY VAC.

19844-Bethlehem Porcupine Processor/Polyester Chip Crystallizer 30" dia. x 16' long, T304 SS, jkt, 20 HP (6) available.
Strong Scott Solidire 24" dia. x 16', S/S, jkt. No mtr.

FILTER PRESSES

16646-Shriver P&F filter press, 12"x12" alum. plates, closed delivery, 23 chambers.
20534-Sperry Filter Press, 30", alumn.
20539-Sperry filter press 30", 35 Aluminum plates, 357 sq.
15370-Shriver 32" x 32", polypropylene, 27 plates, ratchet closing.
15929-Shriver ALP, plate & frame, 16 36" x 36", S/S recessed plates.
20076-Sperry filter press, 36", cast iron plates, closed deliv.
19462-Independent filter press, 42" x 42", polypropylene, 4 eye closed, 34 chambers.
20550-Sperry filter press, 42" End closer, 41 alum. plates.

CENT-BASKET VERT.

20978-Sharples SP6500 Sludge-Pac, 48"x30" S/S w/hydra drives.
21408-Delaval 22"x16" perf. basket hyd. drive.
15615-Delaval Mark III, perf. basket, 40"x24", 316SS, 30 HP, hydr., drive.
19446-Sharples Sludge-Pak, SP-5500, 40"x24" basket centrifuge.
19263-Western States, 48"x30", S/S perf. basket, 50HP hydr. drive, reconditioned.

PRESSES

UNUSED Manesty Express, 10 ton, 20 stations.
11602-Colton Press mod. 260, 31 die stations, 1800 TAB.
21362-FJ Stokes rotary tablet, 15 station, 10 ton.
21418-Manesty rotary tablet, 18 station, 10 ton.
14425-Stokes Tab Press mod. #551, 51 station, 4 ton.
21417-FJ Stokes rotary, 27 station, 4 ton, double sided.
503881-Komarek Greaves, mdl. 75MSS briquetting press, 20.5" dia. x 4.5" face.
13392-Fitzpatrick Chilsonator, 50 HP, mdl. HA-50-30-210.
16802-Stokes single punch press, 900-530-1 (T4), 12 ton.
17224-Dorst compac., series TPA18, 20 tons.
10890-Stokes, mdl. R-4 press, 20 ton.

MIXER/EXTRUDER

17654-AMK 25 gal. Mixtruder, Sigma, ST 7.5 HP.
18298-J.H. Day 25 gal. Dispersion, 25 HP vari main, 10 HP vari screw.
20996-AMK 30 gal. S/S, jkt. Sigma, 7.5 HP Main, 8 HP screw.
21334-Ross 40 gal., S/S hot oil jkt., Sigma 8" disch. screw.
19826-AMK 50 gal. ST, jkt., Sigma.
19421-AMK 75 gal. ST, jkt., Sigma, 10" disch. screw.
17136-AMK 120 gal., ST Sigma, 11.5" screw.
14832-AMK 150 gal., S/S, Sigma 15HP main, 10HP screw
19494-AMK 150 gal., S/S Sigma, 50 HP main, 10HP screw
20116-AMK 150 gal., ST, Sigma, 15 HP/10 HP
603527-New Aaron 300 gal., T304SS, mix extruder, Sigma, jkt., up to 200 HP main, 75 HP hyd. screw.
STILL INSTALLED . . . CALL NOW!

21350-B.P. 500 gal. Sigma steel, jkt. 25 speed, 150 HP, Hyd. tilt

MIXERS – PLOW

503755-Littleford, FKM 600D, SS jacketed, 25 HP.
20754-Littleford, FKM 3000D 85 CF, S/S, full jacket.
16214-New Plow Mixer, 80 cu. ft. 347SS, jacket, 100HP.
20829-Littleford FKM 4200D, S/S, 67 cu. ft. JKT.

MIXER RIBBON

21120-Ribbon Blender, S/S, 18 cu. ft., jkt. SS, 150 psi.
20276-Read ribbon blender, 14.7 cu. ft. 304SS, 3 HP.
20616-Unused Day, 316SS, 23 cu. ft., 5HP.
20189-Robinson, 25 cu. ft., S/S, jacket, 10 HP.
20985-Int'l 34 cu. ft. S/S dbl. ribbon, 5 HP. (4)
20212-Haas ribbon, 36 cu. ft., S/S, 18 HP.
19266-Ribbon Mix 80 cu. ft. T304 SS, 5 HP (4)
19566-Howe, 116 cu. ft., sanitary S/S, double spiral ribbon.
20983-Strong Scott blender, 130 cu. ft., 304SS, 25 XP gear motor.
21124-Ribbon Blender, 304SS jkt., 160 cu. ft., 30 HP.
20814-Unused JH Day ribbon, S/S 270 cu. ft., 25 HP.
21114-JH Day ribbon blender, S/S clad, 78 HP, 480 cu. ft.

"UNUSED" EQUIPMENT

LIQUIDATION SALE AT BARGAIN PRICES

ALL EQUIPMENT STORED IN WAREHOUSE, ON ORIGINAL SKIDS
LOCATION: SPRING GROVE, SOUTH CAROLINA

21717-Bins, S/S, 87 cu.ft., 600 gal., 56" dia. (5)
21711-Bins, 304SS, 850 cu.ft., 6300 gal., 9'0" dia. (16)
21626-Bins, 304LSS, 1300 CF/9700 gal., 11'6", S-S. (2)
21718-Silos, C/S, 50' dia.x 60'H. (4)
21634-Blower, Roots Rotary Lobe, mod. FTB 3505J, 8 HP, unitized, silencers. (4)
21635-Blower, Roots Rotary Lobe, mod. FTB2505J, 5 HP, Silencers. (2)
21636-Blower, Roots Rotary Lobe, mod. 3505J, 7.5 HP, silencers.
21633-Blower, Roots Rotary Lobe, mod. FTB406RCSJ, 10 HP, unitized. (6)
21639-Schwitzer Blower, C/S, 10 HP, 402 CFM.
21637-Schwitzer Blower, 40 HP, 815 CFM. (2)
21632-Blower, Roots Rotary Lobe, mod. FTB412RCSJ, 60 HP, unitized. (3)
21638-Schwitzer Blower, CS, 50 HP, 1126 CFM.
21739-New York Blower, series 30, CS, 60 HP. (3)
21630-Blower, Roots Rotary Lobe, mod. FTB 621RCSJ, 100 HP, unitized. (2)
21631-Blower, Roots Rotary Lobe, mod. FTB616RCSJV, 100 HP, unitized. (3)
21628-Blower, Roots Rotary Lobe, mod. FTB-833RCS, 150 HP, unitized.
21629-Blower, Roots Rotary Lobe, mod. FTB621RCSJ, 150 HP, unitized. (3)
21640-Bird Centrifuge, 24"x 96", mod. HB3900, T304 SS, contour bowl 18 deg., 150 HP. (3)
21703-Nooter Rotary Vacuum Dryer, 4' dia.x 14', 148 cu.ft., FV/100 psi intern., 100 psi jkt., 316SS, 100 HP. (6)
21655-Dust Collector, EVO, air pulse, 87 sq.ft., 381 CFM (6)
21657-Dust Collector, EVO, air pulse, 90 sq.ft. (6)
21656-Dust Collector, EVO, air pulse, 304 SS, 102 sq.ft., 454 CFM. (6)
21662-Rotary Valves/feeder, Flotronics, 6", CS, 3/4 HP. (38)
Rotary Valves/Feeders, Flotronics, 6", S/S 3/4 HP. (24)
21665-Rotary Valves/Feeders, Flotronics, 10", CS, 1 HP. (40)
21666-Rotary Valves/Feeders, Flotronics, 10", CS, 1 HP. (2)
21667-Rotary Valves/Feeders, Flotronics, 10", S/S, 1 HP.
21663-Rotary Valves/Feeders, Flotronics, 14", S/S, 2 HP.
21740-Rotary Valves/Feeders, Flotronics, 14", CS, 3 HP. (2)
21672-Rotary Valves/Feeders, Flotronics, 16", CS, 3 HP.
21664-Rotary Valves/Feeders, Flotronics, 19", CS, 5 HP.
21678-Overstrom Feeder, vibrating, 24"W x 11'L, 1.0 HP.
21677-Overstrom Feeder, vibrating, 24"W x 13'L, 1.0 HP.
21661-Hot Air Furnace, Combustion Engineering, gas fired, 5000 ACFM to 19,800 ACFM at 750 to 1050F. (4)
21682-Heat Exchanger, CS, 680 sq.ft.
21649-Trough Belt Conveyor, 30"x 40', 3 HP.
21546-Bin Sweep Auger, 10" dia.x 27', 7.5 HP. (4)
21645-Screw Conveyor, 304SS, twin screw, 20'L, 8 HP.
21643-Screw Conveyor, 304SS, twin 14" dia.x 75.5', 15 HP.
21642-Screw Conveyor, 316SS, 24" dia.x 16'8", 10 HP. (2)
21719-Diverter Valves, Flotronics, 8", aluminum, air operated (4)
21721-Diverter Valves, Flotronics, 4", aluminum, air operated (4)
21723-Diverter Valves, Flotronics, 2", S/S, air operated (2)
21724-Diverter Valves, Flotronics, 8", aluminum, air operated. (13)
21734-Diverter Valves, Flotronics, 6", S/S. (2)
21735-Diverter Valves, Flotronics, 4", aluminum. (6)
21738-Diverter Valves, Flotronics, 12", aluminum, air operated
21647-Overstrom Conveyor, vibrating, 24"W x 20'L, 1 HP.
21644-Pug Mill, 304SS, 280 cu.ft., twin paddle, twin 30 HP
21693-Sprout Waldron Atmix Blender, 500 cu.ft., 30 HP
21695-Automated Bagging System, twin screw feeds 8" dia., w-scale, bag de-aerator, programmable controls
21696-Semi Automatic Bagging System, Haw Richards mod GB17, hot seal bag closure.
21694-Palletizing conveying system, transfer conv. auto bag palletizer 10 layer
21683-Mikro mod 4th & 4MP, 125 HP (20)
21700-Triplex Pump, 50 GPM, 1500 psi, 50 HP
21701-Peabody Sump Pump, 100 HP (3)
21702-Gorman Rupp, 75 GPM, 3 HP. (3)
21741-Carrier Heating cooling coil unit, roof top. (6)
21743-Sutton Steel Concentrator, 25 HP blower
21706-Sutton Steel MD AM-100 Separator, blower 10 HP
21707-AZO Centrifugal Screener, mod. E800CL SS, 1 HP
21705-Sutton Steel separator, mod. 40-80A, blower 10 HP
21648-Ducon Cyclone, 304SS, 38 3 8" dia., 7500 ACFM (6)
21650-Ducon Cyclone, 38 3 8" dia., 7500 ACFM, 304SS (6)
21709-Fume Scrubber, Croll Reynolds, FRP construction
21714-Tank, 750 gal., CS, epoxy lined, 5' dia., flat top
21712-Tank, horiz., CS, 130 gal. dish heads.
21713-Tank, 8,000 gal., CS, dish heads, 100 psi (7)
21641-Tank, 1300 gal. vert., 304SS, dish bottom (7)
21710-Tank, 2000 gal. vert., FRP, 7' dia.
21715-Tank, 2000 gal. horiz., FRP, 6' dia. (3)
21688-Copper Armour cable, 25 KV 500 MCM, 1 reel, 1200' per reel
21691-Electric cable, 1 reel 710', 850-013035 5KV ... cable.
21692-Electric cable, 1 reel 207', 850-0133563 1 KV ... cable
21690-"Dispozapak" Compactor, mod. D600, trash baler
21687-Mikro Mini Lubrication System, two oil pumps, air health
21607-Shrink Wrap Machine, 12 pallets p h normal rate (3)
21685-Lawson Central Vacuum Cleaning System, cleaning tools & attachments.
21686-Lawson Central Vacuum cleaning System, cleaning tools & attachments.

UNUSED LATE MODEL EQUIPMENT
AT LOW, LOW PRICES
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PLANT LIQUIDATION: CELLULOSE FIBER POLYMER PLANT

BUY FROM CHARLESTON S.C. LOCATION AND SAVE!

21114-JH Day ribbon blender, SS clad, 78 HP, 480 cu.ft., S/S
21237-Shrink wrap oven, heat controls, vert. raising unit.
21119-Fitzmill D1606, S/N D6-4166, 7.5 HP.
21206-Mikro Pulverizer, 100 HP, water cooled. (4)
21218-Mikro Pulverizer, 48CB, 100 HP.

SEVERAL SCREW CONVEYORS
AND MANY OTHER ITEMS
ALL AT BARGAIN PRICES

BUY FROM CALUMET CITY, ILLINOIS LOCATION

LARGE POLYSTYRENE PLANT

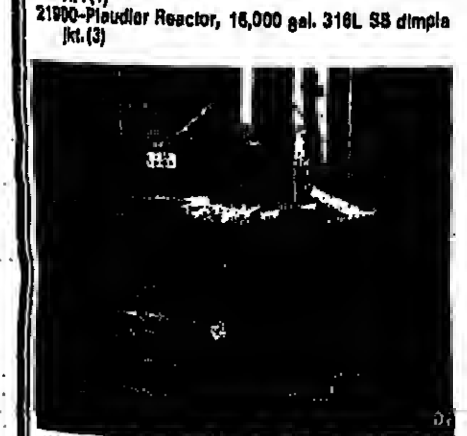
LIQUIDATION SALE

21898-Brighton Corp. 12,000 gal. vessel.

21875-Bins, 176 cu. ft., S/S, cone bottom flat top. (4)
21901-Bins, 450 cu. ft., C/S, epoxy lined. (6)
21904-Bins, 450 cu. ft., C/S, epoxy lined. (6)
21905-Bins, 500 cu. ft., C/S, epoxy lined, flat top, conical bottom. (4)
21918-Worthington cent. pump, C/S, 15 HP, 200 GPM at 44 psig (2)
21815-Union Pump-inline, C/S, mod. 4x6x8.5 VCK, 40 HP. (3)

21888-Strong Scott Rib Blender.

21917-Ingersol Rand Pump, in-line pump, C/S, 30 HP. (2)
21915-Goulds, C/S turbine pump, 200 HP. (2)
21913-Worthington cent. pump, S&S, 2 HP. (4)
21912-Union pump-inline, S/S, 7.5 HP (2)
21899-Pfaudler Reactor, 1,500 gal., 316L SS dimple jkt. (2)
21896-Pfaudler Reactor, 10,000 gal. 316L SS clad, 60 HP. (4)
21900-Pfaudler Reactor, 16,000 gal. 316L SS dimple jkt. (3)



21871-Prodex 8", 30:1 L/D Extruder.

21908-Edw Renneburg Rot. Dryer, S/S, steam heat, 10 HP. (4)
21881-Heaters, C/S steam, type SNF 2420 (6)
21914-Flotronics bin vent, filters, 122 sq. ft., 12 bags.
21890-Kalron feeder, twin screw volumetric, S/S. (4)
21889-Kalron Feeder twin screw, S/S mod. 5400-150 (4)
21891-Sparkler filter, 362 sq. ft. C/S, mod. VR-32-32. (2)
21862-Screw conveyor, 304 SS, 7" dia. x 11L, 1.5 HP. (2)
21886-Strong Scott Rib Blender, 25 cu. ft., 5 HP. (3)
21920-Welex extruder 6", 30:1 L/D, 400 HP.
21870-Welex extruder 6", 30:1 L/D, 600 HP.
21876-Conair pelletizer, S/S, mod. 1024, 40 HP. (2)
21874-Water bath, S/S, portable. (4)
21907-McMillen hyd. pump, 2 HP (2)
21887-Ross Static Mixer, 304SS, 3"x6 element. (4)

21677-Witte screeners, mod. 260-0 S/S (2)
21878-Gorman Rupp pump, centrifugal, C/S mod. 82EZ (2)
21871-Prodex extruder 8", 30:1 L/D ratio, 800 HP.
21872-Welex extruder 6", 30:1 L/D ratio, 700 HP.
21873-Welex extruder 8", 30:1 L/D ratio, 700 HP.
21919-Welex extruder 6", 30:1 L/D ratio, 700 HP.
21882-Buffalo blower, size 30, C/S, 10 HP (3)
21808-Buffalo exhaust fan, size 36, type B, 15 HP.
21880-Sutorbilt Blower, C/S, 40 HP. (4)
21922-Buffalo blower, type 40-3C8, 40 HP. (4)
21884-Buffalo blower, mod. 45-3C8, 75 HP. (3)
21883-Bird, 32 x 50 centrifuge, 80:1 gearbox. (4)

21879-Sweco 60" Sifter.

21902-Worthington compressor, mod. 488-2, vert. 125 psi. (2)
21879-Sweco sifter 60", mod. LS60S88, 2.5 HP.
21823-Kason sifter 60", mod. K601SS, 6/S, 1 HP.
21864-Flotronics Cyclone mod. FTH6C870-T, 304 S/S 12" dia. dish top. (3)

21883-Bird Centrifuge, 32x50, 80:1 gearbox.

21893-Environeering scrubber, mod. A33-14000
21885-Tank, 850 gal. vert. coal tar epoxy lined.
21911-Tank, 6400 gal. vert. C/S epoxy coated flat top/bot.
21903-Tank, 60,000 gal. vert. C/S epoxy, flat bot. conical top.
21886-Brighton Corp. Tank, 12,000 gal. vert., solid 316L SS. (5)

21873-Welex 8" Extruder, 700 HP.

21897-Metal Arts Corp. vessel, 17,000 gal. vert. 317L SS. (2)
21810-Tank, 840 gal., flat top & bottom.
21920-Modern Welding Tank, 4800 gal. horiz. rubber lined.

AARON BUYS COMPLETE PLANTS FOR LIQUIDATION

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AARON EQUIPMENT COMPANY
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Videx

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CENTRIFUGES

SHARPLES P-4000 S/S Vert. (Rebuilt)
SHARPLES AS-18, 16V, 26 S/S clar./sep. (Rebuilt)
BAKER PERKINS HS-10W S/S "Lab" peeler
DELAVAL BRPX 213-35S SS 30 HP
BIRD 24x60 ST/CCF design
WESTFALIA SAMR 5036 SS 15 HP
DELAVAL ACVO Disc/Nozzle SS 20 HP
KRAUSE-MAFFEI 18.5" Pusher S/S (Rebuilt)
SHARPLES P-3400 SS horiz. solid bowl
ALFA-LAVAL NX-214SS DECANTER 20 HP
SHARPLES 48"x30" T-1600 AUTO 316 SS
SHARPLES Mark 3 14" SS perf. auto basket

MIXERS/BLENDERS

PK 2 cu.ft. SS Twin Shell
Readco 5 gal. SS dbl. arm jkt vac. 5 HP
180 cu.ft. Young dbl rib STL jkt. 30 H.P.
300 gal. J.H. Day Pony Mixer Steel w/can
J.H. Day 300 Gal. S/S dbl. arm tilt
(2) Vrieco 100 cu.ft. S/S Nauta Mixers
P/K 10, cu.ft. SS Tw/Sh. w/Liq-Sol bar
Readco 300 gal. S/S dbl. arm 60 HP

DRYERS

Patterson 49 cu. ft. lat. vac. cyl. S/S 3'x 7'
P/K 5 cu.ft. SS liq-Sol. Processor
LOUISVILLE 8x45 SS Rot. Hot Air-Steam
BOWEN 4'6" No. 2 TOWER SPRAY DRYER S/S GAS NOZZLE
Spray Dryer, Bowen 30" lab, Niro 48" utility S/S

FILTERS

4'x20' S/S STRAIGHT LINE 7.5 HP w/ACCESS
SPARKLER 18-D-S S/S Vert. Tank Press Leaf 50#
EIMCO 6'x6' Rot Vac 113 sq.ft. Poly Knife
18",24",39",42" P/F Presses C.I. Poly or S/S
SPARKLER HRC 150 S/S Horiz. Press. Leaf
35,50,150,300 sq.ft. Press Leaf S/S

TANKS/REACTORS

29,000 GAL. HORIZ. 316SS Tanks 40# (2)
300 Gal. Groen S/S Kettle (jkt)
1,200 GAL. T-316 SS REACTOR 30 75/# JKT. w/AGIT.
12000 Gal. Horiz SS w/Top Agit, DH. Hds.
2900 Gal. 25#/FV-85#/jkt. 15HP
30,50,150 Gal. S/S Reactors 100#/75#
19,000 gal. 304 SS vert. w/coil & agit.

MISC. SPECIALS

PK 75 cu. ft. S/S TW/SH mixer w/bar
300 HP SUPERIOR PACKAGE BOILER 150 #2 Oil
15 HP, 30 HP, Agit Drives, variable 25-100 RPM
SIMPSON 1½F, 3F, S/S MIX MULLERS
6'8"x 79' Autoclave 150# w/track QOD
-FITZ Mills S/S 0, D12, FAS012 & Chilsonators
7'x(any length) AUTOCLAVES 100# Code W/Track
-100-10,000 sq.ft. Ht./Exchr's S/S & C/S
150 cu. ft. P/K Twin Shell stl. 10 HP
-100-10,000 gal. G/L Tanks & Reactors
DAY 52 cu. ft. S/S NAUTA MIXER MB-520
DAY 100 gal. S/S dbl. arm sigma jkt. vac.

SAVE

PLANT SITE SPECIALS

38"x72" Bird horiz. solid bowl cent. stl.
Stenafeel 6x58 Rot Hot Air Dryer w/Burner, C/S
200 gal. J.H. Day Pony Mixer Steel W/Can
2000 gal. Pfaudler G/L reactor w/agit.
Bird 40x60 316 S/S Cent. 114:1 100 HP
Feinc. 5'x7' S/S Rot Vac filter
180 cu. ft. Munson Mixer S/S jktd.
12,000 gal Frp Vert. Tanks (2)
1800 gal. Pfaudler G/L reactor 75#/75# w/agit.
Bird 18x28 S/S Contour Bowl Centrifuge
P/S 6' x 45' SS CONVEYER DRYER
22,808 Gal. Tank/Silo SS Vert 12 ft. x 24 ft.

VIDEX WAREHOUSE SPECIAL
NASH CL. 2001, 2002, 3001, 3002, & 4002, Solid Stainless Steel Vacuum Pumps with Motors, Separators, Silencers, Etc.
(CALL FOR DETAILS)

SAVE

JUST PURCHASED

Niagara 24 sq. ft. Press. leaf filter S/S
200 gal. S/S reactor 150#/150# w/agit.
200 gal SS vacuum receiver
Foremost HD-8 Granulators 14x18 (3)
108", 88" 84", 41", 32", extrusion sheet lines
Micro-Pulv 1 SH SS 6 HP w/screw feed
M/G Homogenizer 288 M12-8 TBS (8000 PSI)
Patterson, Abbe 3.5 cu. ft. S/S dbl. cone vac. dryers
Stokes 73 sq. ft. S/S vac. shelf dryer
B/P 80 GAL. STL. D/ARM MIXER JKT. W/DRIVE
Gehnrich Oven SS 6 trays steam heated
250 gal. S/S Reactor 38#/125# jktd. w/agit

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2-UNUSED HOCKMEYER 200/100 HP explosion proof disperser, tank mount, Stainless Steel shaft, manufactured 1982

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Phone 312/541-5600 TELEX 28-2556

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MIXING TANKS-SS, jkt., 100, 300, 500, N. Board
MIXERS-Lightnin ¼ hp to 100 hp, low to high speed
HOMOGENIZER-Emulsifier, jet shear w/fitting, 1.5, 3, 10 hp, hi-speed
BLENDER-Double planetary, 50 gal., Pony SS 316, J.H. Day
RIBBON BLENDER-12 c.f., 55 c.f., 100 c.f., 200 c.f., 250 c.f.
BLENDER DOUBLE SIGMA-Readco 150 gal., all SS, jacketed
DOUBLE CONE BLENDER-5 c.f., SS, Patterson Kelley
DISPERSER-25 hp, Hockmeyer
CENTRIFUGE-A.T.M. basket 60"x25" all SS (2)
CENTRIFUGE-Fletcher 30"x14", 42"x19", 54"x30
KETTLES-G. E. Elect. jkt. Autoclaves-Stokes (8)
KETTLES-10 gal. to 150 gal., jkt, SS, Groen (26)
KETTLE-10 gal. SS, vacuum, jkt, 150 psi, mixer, Groen w/condenser
REACTOR-New Pfaudler, G.L., 10 gal., 125 psi
REACTOR-50 gal., jkt., glasslined, Pfaudler
REACTOR-500 gal., jkt., rated 150 psi, Patterson Kelley
3 ROLL MILLS-4"x8", 6"x14", 8"x12", 12"x32", Buhler, Kent, Day
SAND MILL-25 hp, Chicago Boiler, Red Head
SWECO MILL-M 165 Vibro Energy
SWECO SEPARATOR-2-decks SS 48"
BALL & PEBBLE MILL-Lab., also Muellers
KADY MILL LAB & LAB HOMOGENIZER-Denver v. speed
FILTER PRESS-5.4 sq. ft., and 26 sq. ft., SS
COATING PANS-Stainless and copper 42" (2)
AUTOCLAVES-3'x7', 5'x7', 6'x20', quick opening, smaller sizes
DRUM DRYERS-4"x8", 8"x8", laboratory size, all SS
MIKROPULVERIZER-4th also Fitzpatrick D6
SPRAY DRYER NIRO ATOMIZER-32"x50", all SS
TANKS-10 gal. to 5000 gal, stainless, any shape (200)
MISCELLANEOUS: Lightnin mixer, any size, condensers, dehumpers, pumps: metering, Moyno, centrifugal, Nash vacuum SS, blowers, positive & centrifugal screw and belt conveyor, vary drives & reducers, fittings, volume feeder, oven, furnaces, etc.
LABORATORY EQUIPMENT-For research and testing, largest assortment in New Jersey area.

JUST PURCHASED SHARPLES CENTRIFUGE 30" x 18" SOLID BASKET TOP LOAD, STAINLESS

BLENDER-330 Cu. Ft. Aeco Steel End
BLENDER-10 Cu. Ft. Gemco-Matic Stainless
CENTRIFUGE-49" x 30" Western States Perf., S.S. 316
CENTRIFUGE-#5500 Podbielniak S.S. 316 PUP Series
COLUMN-36" x 20' Pfaudler Glass Packed
COLUMN-24" x 30' Pfaudler Glass Packed
COMPRESSOR-600 CFM @ 125 PSI Clark ICA-6, 150 HP
COMPRESSOR-400 CFM @ 100 PSI Fuller C-80-60H, 100HP
DRYER-5 cu. ft. P.K. Conical Vacuum Stainless
EVAPORATOR-6.54 sq. ft. Rodney Hunt S.S. 316 System
EVAPORATOR-1 sq. ft. Rodney Hunt S.S. 316 w/Condenser
EXCHANGER-388 sq. ft. 304 S.S. 150/150 PSI UNUSED (4)
EXCHANGER-276 sq. ft. 304 S.S. 175/175 PSI UNUSED (2)
EXCHANGER-175 sq. ft. 316 S.S. 150/150 PSI Code
EXTRUCTOR 6" Rietz S.S. 304, 5HP Vari XP
HOMOGENIZER-420 GPH @ 8000 PSI Manton Gaulin Stainless
MILL-27ATM kro Pulverizer Steel, 15 HP
MILL-SH Mikro Pulverizer Steel, 1 HP
PROCESSOR-10 cu. ft. P.K. V-Type S.S. Jkt. Vac. 550# (3)
PROCESSOR 5 cu. ft. P.K. V-Type S.S. Jkt. Vac. 550#
REACTOR-5 gal. Pfaudler FV & 60 PSI, 90 PSI Jkt. 316 S.S.
TANK-10,000 gal. Horizontal, S.S. Clad
TANK 4200 gal. Vertical 304 S.S. 25 PSI UNUSED
TANK-5000 gal. Vertical 304 S.S. 25 PSI UNUSED
VACUUM PUMP-150 CFM @ 26" Nash H-6, 25 HP
VACUUM PUMP 80 CFM @ 1 MM Stokes 149-H-10, 3 HP
VERSATOR-D 8 Cornell S.S. 316, 1½ HP Vari XP

H&P EQUIPMENT CO. INC.
P.O. Box 368, Montville, N.J. 07045
(201) 335-9770 ... TELEX 136157

CMR MARKETPLACE

CHEMICAL MARKETING REPORTER'S CLASSIFIED ADVERTISING SECTION

COPY DEADLINE: Wednesday Noon preceding date of publication.

RATES/Classified Ads: $57.75 for 36 words or less; $9.75 for each additional six words or fraction. No display. First two words printed in bold face type. Non-display advertisements payable in advance, except for contract customers (not subject to agency commission).

REPLIES: Send replies to classified ads with box numbers to **CHEMICAL MARKETING REPORTER**, 100 Church St., New York, NY 10007-2694.

INFORMATION: For further classified advertising information, call **212/732-9820.**

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Available from stock trifluoroacetic acid, trifluoroacetic anhydride, trifluoroacetamide, trifluoroacetic acid ethyl ester, potassium and sodium salt of trifluoroacetic acid. Write for complete list of fluoro compounds. We undertake custom synthesis. Chem Impex, P.O. Box 175, Greendale, Wisconsin 53129 (USA). Tel.: 414-425-3600, Tlx 260107.

Overpack Drums 85 gallon used steel drums with rings and covers. Can hold a 55 gallon drum. Tel.: 014-858-9223 or 658-9593 Telex 05-831545.

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Active Buyer of surplus chemicals, pigments, dyes, resins, waxes, plastics etc. Call toll free 1-800-831-3337 or 017-929-6736. Deer Polymer Corp. Chemical Div. 17 Industrial Drive, Holden, MA 01520.

All Surplus — Chemicals — Resins — Oils — Colors Solvents — Plasticizers — Specialties — Intermediates — bought by: Rambach Chemical Co., Inc. 52 Vesey Street, PO Box 5187, Newark, NJ 07105. Phone: (201) 589-7774.

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Resyn Corp. will buy your surplus chemicals, resins and resin raw materials — prime or off-specification. Resyn Corp. P.O. Box 63, 1540 W. Blancke St., Linden, NJ 07036. (201) 862-8787.

We Buy Surplus chemicals, colors, resins, solvents, plasticizers by-products, etc. Over 50 years of service to industry. Eastern Color & Chemical Co., Inc. 65 Roosevelt Ave., Dept. C.P.O. Box 1029, Valley Stream, N.Y. 11582. (516) 791-4445.

EQUIPMENT OFFERED

Cumberland Chopper 50 hp. Mitts & Merrill "Hogger" 100 hp. 100 gal. glass lined reactor, Pfaudler. 6.S. jacketed vessels, 100-500 gals. Ourion 3 X 1½–0 HP. Pump. 500-7000 gallon S.S. tanks. Gaulin Hi Pressure Pumps. Lester Kehoe Machinery Corporation, 2081 Richmond Terrace, Staten Island, NY 10303 (718) 447-3410, Telex DRURY 423 496.

Laboratory Glassware. Company dropping lab glassware business and liquidating Fisher lab glassware and Mallinckrodt plasticware inventory at cost. Substantial savings on major purchases. (305) 272-9022, Delray Chemical Co., Delray Beach, FL 33444.

Ribbon Blenders for sale. In stock and remanufactured 10 cu. ft., 50 cu. ft., and 70 cu. ft. Stainless Steel double ribbon blenders. Tom Willems Co. 9503 Fremont, KC, Mo. 64134 816-761-6481.

Tanks For Sale: Blue Glass & Epoxy Lined Tanks up to 37,000 gal. ea. from Milwaukee and Detroit. Sacrifice price! Free list: Brewery Works, Box 1487, Milwaukee, WI 53201-1487. (414) 272-1702.

EQUIPMENT OFFERED/WANTED

Gelatin powder/sheets. Require machinery and know-how for new plant. Interested turn-key proposition or engineering consulting. Wm. Bernstein Co. Inc., 15 Park Row, NY, NY 10038 (212) 233-5922.

POSITIONS OFFERED

Challenging Position Open: Unique opportunity to head research and development activities including implementation of a product line expansion involving mineral waxes. Ideal candidate should be knowledgeable in waxes, their properties and their industrial uses plus be versed in business planning. Technical or engineering degree desirable. Salary commensurate with experience and qualifications. Reply in confidence to: ALPCO, Box 1066, Ione, California 95640.

POSITIONS OFFERED

Chemical Sales: Small but growing industrial chemical distributor specializing in LTL business in the Northern N.J. and N.Y.C. area seeks experienced distributor salesman who can help this company expand. Equity position available for the right person. CMR-Box #710.

Comptroller Leading bulk fine chemical distributor — North Jersey area. Candidate should have degree in accounting with knowledge of data processing helpful. Position includes direction of all accounting department functions including reporting to management. Attractive starting salary including profit sharing and chances for advancement. Submit resume and salary history to: CMR 709.

SERVICES OFFERED

Custom solids packaging and distribution in the port of Mobile. Multi-wall bags, bulk bags, drums and bulk. Screening, repackaging and warehousing. Rail and truck facilities. Contact: Philip Hahn, BEAPAC, Bldg. 14A, Brookley Complex, Mobile, AL 36615. 205/433-3541.

Pfizer Drugs In New Forms

Pfizer, Inc. says it will market two of its leading pharmaceutical products in new forms that will provide greater therapeutic utility for physicians, patients and hospital personnel.

The company said it has received Food & Drug Administration clearance to market a new 20 milligram dosage form for "Procardia" (nifedipine) and a new delivery system for "Cefobid" (cefoperazone sodium), a third generation injectable cephalosporin antibiotic.

The new 20-milligram capsule of "Procardia" offers a prescribing option for physicians, Pfizer says. In addition, "Cefobid" will soon be available in a drug delivery system called "Mini-Bag" plastic container through a joint venture with Baxter Travenol.

Pfizer says the new "Procardia" capsule provides the opportunity for enhanced patient compliance through superior dosage convenience. Angina patients who are taking "Procardia" at higher doses now have the option of switching to the new 20 milligram "Procardia" capsule.

Fertilizer Use Falls By 10 Pct., Industry Says

Domestic disappearance of fertilizers from producers was 10 percent less for the 12 months ending June 1986 than in the previous period, according to the Fertilizer Institute. Disappearance for the month of June was 19 percent less.

Disappearance was down in all product groups, in both the monthly and yearly comparisons. In the year-to-date comparison, nitrogen product disappearance declined 11 percent, processed phosphates declined 2 percent and potash products declined 11 percent, industry association says. Phosphate rock shipments were 15 percent less than in 1985.

Exports of all products declined 33 percent in 1986 relative to 1985, including a decline of 48 percent in diammonium phosphate and 48 percent in solid urea. Total imports were equal to last year, with increased urea imports being largely offset by lower imports of potash products, according to TFI.

Production of fertilizers was 16 percent less for the July 1985-June 1986 period, and 22 percent less in the monthly comparison. In the annual comparison, production in all product groups was less than in the previous year. In June, however, US production of potash grew 30 percent overall relative to June 1985.

Total ending inventory increased 19 percent in June 1986 compared with last year. Inventories for all product groups, except potash and mixtures, increased.

Domestic disappearance of nitrogen products was 17 percent lower in June, and 11 percent lower in the July-June comparison. Shipments of solid urea were 25 percent greater for the year, while disappearance of other products declined.

Nitrogen production dropped 24 percent in June and 14 percent in the July-June period. All products declined in the annual comparison, except ammonium sulfate, which was even with last year.

Urea imports have increased 56 percent over last year. Imports of anhydrous ammonia declined 5 percent and ammonium sulfate declined 8 percent in the yearly comparison. Anhydrous ammonia exports declined 29 percent in the July-June comparison.

Ending inventory of nitrogen products increased 34 percent in June 1986 relative to June 1985. All product inventories rose except urea.

Disappearance of processed phosphates was 84 percent less in June 1986 compared with June 1985. In the July-June comparison, disappearance was 2 percent less. For the year, disappearance of diammonium phosphate, monoammonium phosphate and superphosphoric acid increased or was even with the prior year; while disappearance of other phosphates declined, TFI says.

Production of phosphates was less, by 21 percent in the annual comparison and 23 percent in the monthly. Production in June 1986 declined in all products except monoammonium phosphate, which increased 45 percent.

Exports of phosphates, including phosphate rock, were less in the July 1985-June 1986 period, except for monoammonium phosphate. Total exports of MAP improved 1 percent to 485,000 tons for the year. Phosphate rock imports totaled 349,000 tons for the July 1985-June 1986 period.

Total phosphate inventory increased 5 percent at the end of June, compared with June 1985. The inventory of phosphate rock was [illegible] percent higher, concentrated superphosphate was 62 percent higher, and MAP inventory was 20 percent higher. Diammonium phosphate declined 12 percent from June 1985.

Disappearance of potash products was 11 percent lower in the July 1985-June 1986 comparison, and 26 percent lower in June. Standard muriate disappearance increased in both comparisons, 5 percent in the annual and 132 percent in the monthly.

Production of potash in the U.S. declined [illegible] percent for the 12-month period, relative to 1985, but increased 30 percent in June 1986.

Imports of potassium muriate were [illegible] percent less for the year, while exports declined 24 percent.

Ending inventories declined 6 percent in the U.S., and 17 percent in the U.S.-Canada total, at the end of June 1986. Standard muriate inventory increased 30 percent relative to last year, TFI says.

Disappearance of NPK mixtures was [illegible] percent less for the monthly comparison and 21 percent less for the year. Production was down 22 percent in the July-June period, and ending inventory declined 5 percent at the end of June 1986.

GE Gets Assets Of J&J Business

Johnson & Johnson and General Electric Company have completed a transaction under which GE has acquired certain assets of Johnson & Johnson's diagnostic imaging services business.

As part of the transaction, GE will continue to offer service for diagnostic imaging products made by Technicare and Johnson & Johnson Ultrasound and will assume service contracts and certain customer service support obligations.

"When Johnson & Johnson decided to exit the medical diagnostic imaging business, it created an opportunity for GE to serve Johnson & Johnson customers," GE says. "We're pleased to be able to continue to provide the excellent service these customers have come to expect."

Approximately 800 Johnson & Johnson employees worldwide — primarily service and support employees — will become GE employees as part of this acquisition.

ADVERTISERS' INDEX

CHEMICAL IMPORTS

Continued from Page 41

PENTANES Chase Manhattan Bank 8211104 gal (48359193 lbs) (Bow Flower) Coatzacoalcos, 7/10.
PERCHLOROETHYLENE Order of Shipper 1 bks (1088365 lbs) (Stephanie) Rotterdam, 7/8.
PETROLEUM RESIN Broadland Freight Service 820 bgs (34381 lbs) (Hanjin Yokohama) Busan, 6/25.
Panalpina 700 bgs (38735 lbs) (American Kentucky) Kaohsiung, 6/24.
PHENAZOPYRIDINE HCL Alltransport 49 dms (5972 lbs) (Heide) Hamburg, 6/24.
PHENYLACETIC ACID Inter Maritime Fwdg 300 dms (35847 lbs) (Stefan Starzynski) LeHavre, 6/23.
PHOSKADENT NA 211 Order 720 bgs (40238 lbs) (Stuttgart Express) Bremerhaven, 6/24.
PHOSPHORIC ANHYDRIDE Order 608 dms (91712 lbs) (Zim New York) Barcelona, 6/28.
PHOSPHORUS AMORPHOUS Linden Laboratories 276 dms (28781 lbs) (Hoegh Mary) Bombay, 6/28.
PHOTOGRAPHIC GELATIN Order 500 bgs (22873 lbs) (Dart Continent) Felixstowe, 6/24
352 dms (83034 lbs) (Zim Iberia) Osaka, 6/24.
PHTHALOCYANINE BLUE CRUDE Dainichiseika Color & Chemic 400 bgs (20708 lbs) (Ming Glory) Yokohama, 6/23
POLYVINYL ALCOHOL Oviol 1 dms (302 lbs) (Dart Continent) Antwerp, 6/24.
POLYVINYL ALCOHOL 805 Sakai Trdg 850 bgs (38415 lbs) (Hanjin Yokohama) Kobe, 6/25.
POLYVINYL CHLORIDE B Tarkett 22 plt (43431 lbs) (Ever Laurel) Hamburg, 6/22
POLYVINYL CHLORIDE Morlett 1200 bgs (67196 lbs) (Ever Laurel) Antwerp, 6/22
POTASSIUM BICARBONATE PHARMAON Kay Fries 132 dms (41347 lbs) (Ever Laurel) Antwerp, 6/22
POTASSIUM CHLORATE Universal Match 192 dms (44092 lbs) (Stuttgart Express) Bremerhaven, 6/24.
POTASSIUM CHLORIDE Potash Import & Chemical 720 bgs (40000 lbs) (Dart Continent) Bremerhaven, 6/24.
POTASSIUM HYDROXIDE Mallinckrodt 343 dms (40000 lbs) (Atlantic Concert) Gothenburg, 6/24.
POTASSIUM SORBATE GRANULAR Order 200 dms (22046 lbs) (Ming Glory) Kobe, 6/23
POTASSIUM SORBATE SORBIC ACID Order 210 dms (23413 lbs) (Ming Glory) Kobe, 6/23.
PROPYLENE DICHLORIDE Leschaco 1 con (44797 lbs) (Ever Laurel) Rotterdam, 6/22.
PROPYLENE TRIMER NONENE Order 1 bks (1112238 lbs) (Shoun Fujiyama) Le Havre, 7/16.
PSEUDOEPHEDRINE Ganes Chemicals 40 pkg (2557 lbs) (American Kentucky) Hong Kong, 6/24.
PSYLLIUM SEED HUSK Commodity Service 2940 bgs (133883 lbs) (American Kentucky) Khor Fakkan, 6/24
QUINIDINE SULFATE Lasson Intl Fwdrs 24 dms (4365 lbs) (Stuttgart Express) Hamburg, 6/24.
QUINOLINE Howard Hall Intl 20 dms (9833 lbs) (Starfield) Antwerp, 6/28
QUINTONE R100 PETROLEUM RESIN Mitsui 8810 bgs (338082 lbs) (Ming Glory) Kobe, 6/23.
RED OXIDE Roehlig Fwdg 8000 sks (40221 lbs) (Almudena) Cadiz, 6/25.
ROSEMARY LEAVES E L Scott 410 bgs (45195 lbs) (Almudena) Lisbon, 6/26.

S-T

SARSAPARILLA ROOT Moer 24 bgs (2698 lbs) (Hoegh Mary) Calcutta, 6/28.
SESAME SEED Great Lakes Intl 880 bgs (44440 lbs) (Saint Louis) Haina, 6/27.
GSF Intl 920 bgs (21074 lbs) (Saint Louis) Haina, 6/27.
Suchar 1840 bgs (92000 lbs) (Saint Louis) Haina, 6/27.
SILICONE SC 162 Order 1 tnk (40124 lbs) (Heide) Antwerp, 6/24.
SODIUM ACETATE ANH AGGL Daniel F Young 720 bgs (40476 lbs) (Starfield) Rotterdam, 6/26.
SODIUM BICARBONATE Randimpex 4320 bgs (240476 lbs) (Ever Laurel) Antwerp, 6/22.
SODIUM BIFLUORIDE IMDG 8 UNNO 24 ORDER 180 dms (42084 lbs) (Ever Laurel) Hamburg, 6/22.
SODIUM CARBOXYMETHYL CELLULOSE A Robeco Chemicals 60 sks (46581 lbs) (Ever Laurel) Rotterdam, 6/22.
SODIUM CHLOROACETATE Order 792 bgs (89567 lbs) (Ever Laurel) Antwerp, 6/22.
SODIUM DICHROMATE Calabrian Intl 380 bgs (76998 lbs) (Starfield) Rotterdam, 6/26.
SODIUM ERYTHORBATE & GLUCONATE PMP Fermentation Products 535 pkg (39773 lbs) (Ming Glory) Kobe, 6/23.
SODIUM FLUORIDE Trans World Shpg 700 bgs (38973 lb) (Ever Gather) Osaka, 6/28.
SODIUM FORMALDEHYDE SULFOXYLATE Atlas Intermodal Transport 220 dms (38282 lbs) (Ming Glory) Kaohsiung, 6/23.
SODIUM HYDROXIDE J T Baker Chemical 1372 dms (180004 lbs) (Sea Land Developer) Rotterdam, 6/26.
SODIUM HYDROXIDE NF 7680 Mallinckrodt 343 dms (40000 lbs) (Atlantic Concert) Gothenburg, 6/24.
SODIUM HYDROXIDE NF 7708 Mallinckrodt 343 dms (40000 lbs) (Atlantic Concert) Gothenburg, 6/24.
SODIUM METHOXIDE POWDER Dynamit Nobel Chemicals 152 pkg (38457 lbs) (Stefan Storzynski) Bremerhaven, 6/23.
SODIUM NITRATE Crystal Chemical Supply 38 dms (2174 lbs) (Stuttgart Express) Greenock, 6/24.
SODIUM SACCHARIN Order 450 dms (47399 lbs) (Hanjin Yokohama) Busan, 6/25.
SODIUM TRIPOLYPHOSPHATE Browning Chemical 400 bgs (41711 lbs) (Heide) Hamburg, 6/24.
Economics Lab Exports 40 bbg (89288 lbs) (Almudena) Leghorn, 6/25.
2 con (89288 lbs) (Almudena) Leghorn, 6/25.
SODIUM TRIPOLYPHOSPHATE GRANULAR Cosmos Shpg 432 pkg (44874 lbs) (Zim New York) Haifa, 6/28
652 plt (89376 lbs) (Zim New York) Haifa, 6/28.
SORBIC ACID Order 390 dms (42320 lbs) (Stefan Starzynski) Bremerhaven, 6/23.
STANNOUS SULPHATE SOLUTION Goldschmidt Chemical 70 dms (30428 lbs) (Ever Laurel) Antwerp, 6/22.
STREPTOMYCINE BASE Rhone Poulenc 50 ctn (1798 lbs) (Atlantic Service) LeHavre, 6/24.
STYRENE OXIDE Rhone Poulenc 72 dms (34478 lbs) (Nedlloyd Rouen) Marseille, 6/24
SUCCINIC ANHYDRIDE Elco Shpg 144 dms (42222 lbs) (Stefan Starzynski) Bremerhaven, 6/23.
SULFACETAMID Richard Boas 19 dms (2450 lbs) (Stuttgart Express) Hamburg, 6/24
SULFACETAMIDE SODIUM Generichem 220 dms (25876 lbs) (Starfield) Rotterdam, 6/26
SULFAMIC ACID Atlas Intermodal Transport 2240 bgs (12040 lbs) (Ming Glory) Keelung, 6/23.
SULPHATHIAZOLE Order 156 dms (19947 lbs) (Heide) Hamburg, 6/24.
SULPHONIC ACID Lubrizol 3 tnk (139561 lbs) (Stuttgart Express) Greenock, 6/24
SULPHUR HEXAFLUORIDE Montedison 329 cyl (77912 lbs) (Almudena) Genoa, 6/25.
TANNIC ACID Order 50 dms (6008 lbs) (Starfield) Antwerp, 6/26
THIOUREA DIOXIDE Degussa 120 dms (27804 lbs) (Stuttgart Express) Hamburg, 6/24
TITANIUM DIOXIDE D N Lukens 5 con (200619 lbs) (Almudena) Cadiz, 6/25.
Durr Marketing 1800 bgs (83000 lbs) (Sea Land Developer) Rotterdam, 6/26.
Leschaco 3040 bgs (158203 lbs) (Stuttgart Express) Antwerp, 6/24.
TITANIUM DIOXIDE Morinture Brothers 172 dms (21236 lbs) (Ming Glory) Yokohama, 6/23.
N L Ind 600 bgs (333688 lbs) (Stefan Starzynski) Rotterdam, 6/23.
2700 bgs (139882 lbs) (Stuttgart Express) Antwerp, 6/24.
Huxley Raw Material 760 bgs (39590 lbs) (Stefan Starzynski) Bremerhaven, 6/23.
Mercury Paint 720 bgs (39174 lbs) (Stefan Starzynski) Bremerhaven, 6/23.
Mohawk Paper Mills 340 bgs (33340 lbs) (Stefan Starzynski) Bremerhaven, 6/23.
Ind & Chemical 4800 pkg (250286 lbs) (Atlantic Saga) Rotterdam, 6/10.
N L Ind 3200 bgs (163952 lbs) (Heide) Hamburg, 6/24.
8400 bgs (331575 lbs) (Sea Land Developer) Rotterdam, 6/26.
WIC Ocean Freight 900 bgs (371431 lbs) (Ever Laurel) Hamburg, 6/22.
Blue Bell Chemical 800 bgs (41800 lbs) (Sea Land Developer) Rotterdam, 6/26.
D N Lukens 1800 bgs (83000 lbs) (Sea Land Developer) Rotterdam, 6/26.
Superior Materials 1600 bgs (63000 lbs) (Sea Land Developer) Rotterdam, 6/26.
TOBIAS ACID POWDER & SAMPLE Montedison 181 pkg (46341 lbs) (Nedlloyd Rouen) Leghorn, 6/24.
TOLBUTAMIDE USP 20 DRUGS Harbottle 67 pkg (6110 lbs) (American Kentucky) Singapore, 6/24.
TOLUYLENE DIISOCYANATE DESMODUR T Leschaco 1 tnk (39858 lbs) (Atlantic Service) Bremerhaven, 6/24.
TRIALLYL ISOCYANURATE BHT & T6H Corred & O Nel 60 dms (29498 lbs) (Hanjin Yokohama) Yokohama, 6/25.
TRICHLOROACETIC ACID Roussel 80 dms (9436 lbs) (Stuttgart Express) Hamburg, 6/24.
TRIMETHYL CYCLOHEXENYL METHYL BU Curto & Funk 79 pkg (34484 lbs) (Atlantic Saga) LeHavre, 6/10.
TRIMETHYLCHLOROSILANE Rhone Poulenc 10 dms (4343 lbs) (Nedlloyd Rouen) Marseille, 6/24.
TRIMETHYLOLPROPANE Leschaco 1 tnk (41448 lbs) (Stuttgart Express) Rotterdam, 6/24.
TRISODIUM CITRATE DIHYDRATE FINE Nedwick Steel 792 bgs (89727 lbs) (Ever Laurel) Antwerp, 6/22.
TRITYL CHLORIDE Chemical Dynamics 23 kgs (3446 lbs) (Atlantic Concert) Liverpool, 6/24.

U-Z

UREA FORMALDEHYDE MOULDING POWDE Order 620 bgs (40194 lbs) (Zim New York) Haifa, 6/26.
VANILLA EXTRACT Charis Imports 100 cs (4650 lbs) (Saint Louis) Haina, 6/27.
VANILLA HALVA Adamba Imports 100 ctn (4508 lbs) (Stefan Starzynski) Bremerhaven, 6/23.
VANILLIN Rhone Poulenc 360 dms (42776 lbs) (Nedlloyd Rouen) Marseille, 6/24.
VINYL PYRROLIDONE NON HAZARDOUS Order 1 tnk (42417 lbs) (Heide) Hamburg, 6/24.
WOOL GREASE Hummel Lanolin 76 dms (36345 lbs) (Heide) Rotterdam, 6/24.
ZINC CHROMATE BDP Intl 700 bgs (39817 lbs) (Stefan Starzynski) Rotterdam, 6/23.
ZINC SULPHATE HEPTAHYDRATE United Mineral & Chemical 100 bgs (11823 lbs) (Heide) Antwerp, 6/24.
ZINC SULPHATE MONOHYDRATE United Mineral & Chemical 860 bgs (67937 lbs) (Heide) Antwerp, 6/24.

CHEMICAL PROFILE

FUMARIC ACID

AUGUST 11, 1966

SUPPLY

PRODUCER	CAPACITY*
Danka, Duluth, Minn.	6
Pfizar, Tarre Haute, Ind.	30
Total	36

*Millions of pounds annually. Denka acquired its Duluth fumaric acid facility, along with malic acid capacity at the site, from Alberta Gas Chemicals, Inc. in July of last year. Kafama Chamical shut its 10-million-pound-per-year plant in Garfield N.J. last quarter. The plant is ready for startup on short notice if market conditions warrant. Monsanto's 30-million-pound-per-year plant in St. Louis, Mo. remains idle. Monsanto and Pfizer share the output of Pfizer's plant in Terre Haute. US Diversified Group, an operating unit of the newly-named USX Corporation, will not restart fumaric acid production at its 10-million-pound-per-year unit in Neville Island, Pa. Fumaric acid production was halted there in February 1983. Profile last published 7/4/83; this revision; 8/11/86.

DEMAND

1985: 30 million pounds; **1986:** 30 million pounds; **1990:** 33.2 million pounds.

GROWTH

Historical (1976-1985): 0 percent per yeer; **future:** 2 percent per yeer through 1990.

PRICE

Historical (1952-1986): High, 67c. per pound, tech., c.l., t.l., f.o.b. works, frt. equald.; low, 17c. per pound, divd. **Current:** 62½c. per pound, tech. same basis. 75¼c. per pound, food-grade, same basis.

USES

Paper size resins, 48 percent; food acidulent, 20 percent; unsaturated polyester resins, 16 percent; alkyds, 5 percent; exports, 5 percent; miscellaneous, 6 percent.

STRENGTH

In the past three years, idled facilities and capacity shutdowns have turned a severe oversupply into a well balanced supply/demand situation. Fumaric acid is less costly than citric acid, its primary competitor in food uses.

WEAKNESS

Maleic anhydride, used in unsaturated polyester resins, has stunted fumaric acid's growth in that application. Fumaric acid is less soluble than citric acid and therefore less desirable in some food uses.

OUTLOOK

Fumaric acid is a mature product. At best, growth will match GNP over the next five years.

PLATFORM

'Acceptable' Risk

The following remarks are excerpted from a speech by Milton Russell, assistant EPA administrator for policy planning and evaluation, to the Texas Water Pollution Control Association.

Once we found pollution with our eyes and noses. Now we use GCMSs to measure it in parts-per-million, parts-per-billion, even parts-per-quadrillion. But this information is useful only if we can figure out what it means for human health and the environment. We are back to the question, "What is the risk?"

We need to ask what "parts-per-trillion" of a given toxin means. To find a toxin is not to conclude we must remove it. In a world of limited resources, that conclusion would lead to chasing ever smaller quantities of a pollutant at exponentially rising expenditures of labor, dollars and scientific and engineering talent.

There are more toxins—natural and man-made—in this life than any of us can ever hope to eliminate. A brute fact should be engraved on our consciousness: given finite resources, when we choose to reduce one toxin, we also choose to tolerate another. And, even where we concentrate on one toxin—whether it be PCB or dioxin or whatever—we cannot expect to achieve perfection. This leads me to believe we need a stopping point, a point at which we will agree that we have cleaned up far enough in a given case, and it is time to turn to another.

What is the basis for stopping? In my judgment it has little to do with the specific toxin or its concentration and much to do with the risk it poses to people and the environment. If our goal is not purity, or even neatness for its own sake, we must identify risk and reduce it to the point at which it becomes acceptable to our society—thus, the concept of "acceptable risk."

The difficulty of this question for a public policy maker is that it is not scientific, technical or administrative in nature. The question is basically sociological, and it pertains at two levels: generally, in the case of national policy, and, specifically, in the case of local situations.

In the first case, we must ask ourselves what kind of society we really want, what values we expect our national policies to reflect. The American people want a safe and healthy environment, but they want other things, too. They want a strong national defense, first-rate transportation, better and cheaper medical care, good homes, labor-saving appliances, a varied diet and entertainment. Those who uphold the environment as a primary value compete daily with the advocates of these other worthy objectives. Our job at EPA is to effectuate as best we can, under the laws, the decisions of the American people as to these painful trade-offs.

Two years ago, Tacoma, Washington, faced a threat to a smelter that played an important role in the community economy. The trouble was arsenic emissions that we at EPA found to be a source of risk to the public health. Our administrator at that time, Bill Ruckelshaus, believed, as I do, that finding and quantifying risk is one thing. What you do about it is another. Ruckelshaus went to Tacoma and talked with the people there. Here were the clear facts about the danger of cancer. Here were the clear facts showing that reducing that risk as far as possible would be so costly that the plant management would have to consider shutting down. Was it better to accept elevated rates of disease in the community? Or to accept lost jobs, a weakened economy and the individual distress that would yield? There was no lady—just two tigers. Tacoma answered, "some of both." They wanted us to reduce the health risk as far as possible, but not so far as to endanger the plant's survival. As it happens, the plant closed down for other reasons. But the case is instructive.

Risk is acceptable to different people under different circumstances. But neither government nor the people affected can make a reasonable decision unless the risks and implications of reducing them are known.

The Whole Message

The following remarks are exerpted from a speech by Jackson Browning, vice president for health, safety and environmental affairs for Union Carbide Corporation, to the Environmental Conference in Cleveland, Ohio.

Chemical production today must be done in a way that responds to a whole range of pressures and demands—for quality, for purity, for cost, for environmental regulations, for concern for employees, concern for the environment, and on and on. If a chemical company doesn't respond adequately to all of these requirements—in other words, if it doesn't get the whole message—then the company is not going to be viable for long in today's world...

It seems to me that if our companies are to get the whole message, then we risk managers, safety people, or environmental experts—call us what you will—must be part of the team.

But, we've got to be able to contribute more than just a technical understanding of what must be done in the health, safety, and environmental area. We've got to be prepared to bring a certain kind of sensitivity to the process, a sensitivity to public fears and concerns, as well as to the regulatory requirements.

The fellow living across the street from our plants really has only one interest. He simply wants to feel secure. He wants to sleep soundly at night knowing that we've got the lids screwed on tightly.

MEETINGS CALENDAR

AUGUST 11, 1986

THIS WEEK

AMERICAN CHEMICAL SOCIETY, chemical marketing and economics division, seminar on R&D management, Scanticon-Princeton executive conference center and hotel, Princeton, N.J., August 13-15.

THIS MONTH

AMERICAN INSTITUTE OF CHEMICAL ENGINEERS, Summer national meeting, Sheraton Boston Hotel, Boston, Mass., August 24-27.

LATER ON

AMERICAN CHEMICAL SOCIETY, 192nd annual meeting, Anaheim Convention Center, Anaheim, Calif., September 7-12.

AMERICAN MICROCHEMICAL SOCIETY, eastern analytical symposium, jointly with American Chemical Society and Society for Applied Spectroscopy, New York Hilton Hotel, New York, October 20-24.

AMERICAN PETROLEUM INSTITUTE, annual meeting, San Francisco, Calif., November 9-11.

ASSOCIATION OF OFFICIAL ANALYTICAL CHEMISTS, 100th international meeting and exhibition, The Registry Hotel, Scottsdale, Ariz., September 15-18.

ASSOCIATION OF THE NON-WOVEN FABRICS INDUSTRY, eighth international conference and exhibition, Georgia World Congress Center, Atlanta, Ga., October 21-23.

CANADIAN CHEMICAL PRODUCERS ASSOCIATION, international symposium on transportation emergency response, Vancouver, B.C., Canada, September 14-18.

CHEMICAL GROUP, NATIONAL ASSOCIATION OF PURCHASING MANAGEMENT, Fall Conference, Marriott Pavilion Hotel, St. Louis, Mo., October 21-23.

CHEMICAL MARKETING RESEARCH ASSOCIATION, world chemical congress, jointly with the chemical marketing and economics division of the American Chemical Society, "The Chemical Industry: Where in the World Is It Going?", Newporter Resort Hotel, Newport Beach, Calif., September 7-10.

CHEMICAL SPECIALTIES MANUFACTURERS ASSOCIATION, seminar on aerosol technology, Ramada Hotel O'Hare, Rosemont, Ill., October 27-29; 73rd annual meeting, Marriott's Harbor Beach Resort, Fort Lauderdale, Fla., December 7-11.

CHLORINE INSTITUTE, Fall meeting, The Homestead, Hot Springs, Va., September 21-25.

COMMERCIAL DEVELOPMENT ASSOCIATION, impact of mergers and acquisitions on the future of technology-driven corporations, Hershey Hotel, Hershey, Pa., October 26-29.

CONFERENCE BOARD, business outlook conference, Waldorf-Astoria Hotel, New York, September 24-25.

COUNCIL FOR CHEMICAL RESEARCH, annual meeting, Northwestern University, Evanston, Ill., September 28-30.

COUNCIL FOR RESPONSIBLE NUTRITION, annual meeting, "Health Messages: New Directions and New Opportunities," J.W. Marriott Hotel, Washington, D.C., September 7-10.

EUROPEAN PETROCHEMICAL ASSOCIATION, annual meeting, Monte Carlo, Monaco, September 28-October 1; distribution meeting, October 19-October 22.

FERTILIZER INSTITUTE, world fertilizer conference, "Global Trading Patterns," Hyatt Regency Hotel, San Francisco, Calif., September 14-16.

FERTILIZER ROUND TABLE, Sheraton Inner Harbor Hotel, Baltimore, Md., November 17-19.

FIRE RETARDANT CHEMICALS ASSOCIATION, Fall conference on proper processing and selection of flame retardants, Kiawah Island, S.C., October 19-22.

FRAGRANCE MATERIALS ASSOCIATION OF THE UNITED STATES, 10th international congress of essential oils, fragrances and flavors, Omni Shoreham Hotel, headquarters hotel, Washington, D.C., November 16-20.

K-'86, 10th international trade fair for plastics and rubber, Dusseldorf, West Germany, November 6-13.

LATIN AMERICAN PETROCHEMICAL ASSOCIATION, sixth annual meeting, Rio Palace Hotel, Rio de Janeiro, Brazil, November 23-25.

NATIONAL PAINT & COATINGS ASSOCIATION, 98th annual meeting, Atlanta Hilton Hotel, Atlanta, Ga., November 3-5.

PULP CHEMICALS ASSOCIATION, 13th international naval stores meeting, Waldorf-Astoria Hotel, New York, September 15-17.

SOCIETY OF CHEMICAL INDUSTRY, chemical industry medal dinner, Plaza Hotel, New York, October 16.

SOCIETY OF CHEMICAL INDUSTRY, chemical industry medal dinner, Plaza Hotel, New York, October 16.

SYNTHETIC ORGANIC CHEMICAL MANUFACTURERS ASSOCIATION, OSHA compliance trade fair and seminar, Intercontinental Hotel, New Orleans, La., September 25-26.

JOBS & PEOPLE JOBS & PEOPLE

Dale H. Spiess, who has been named group vice-president of sales and marketing services for Enron Chemical Company. He was previously group vice-president of converted products.

DAVID K. SEIFERT has joined M&T Chemicals Inc. as manager of operations analysis... **WALLACE N. COX** has been appointed a technical representative in the chemicals laboratory at Eastman Chemical Products Inc... **JERRY A. WINDISCH** has been named account supervisor for organic resin sales in the technical marketing group of Hercules Incorporated.

MICHAEL J. SCHERER has been appointed technical director of polysulfide applications and technical service for Morton Chemical Division... **PAUL C. KENDALL** has been named technical sales representative for BioGuard's Chemical Specialties Division... **J. RICHARD WEBB** has been appointed president of Pfaudler Company, a unit of Standard Oil.

TERI S. LEBEAU has been named business manager for organic intermediates in the chemicals and metals product department at Dow Chemical USA... **DR. BERNARD D.**

D. Seifert

W. Cox

PQ Corporation Names Area Sales Managers

PQ Corporation has named D. Neil Fleming Eastern area sales manager and Rosalyn T. Kutchins Western area sales manager, both in the Industrial Chemicals Division.

Mr. Fleming will be responsible for the territory covering New England, Pennsylvania, Maryland, South Jersey, Virginia, West Virginia, North Carolina and South Carolina.

Miss Kutchin's territory includes California, Washington, Oregon, Nevada and Arizona.

D. Fleming

R. Kutchins

BAUMAN has been appointed manager of technology and commercial development in Air Products & Chemicals Inc.'s surface treated products department.

GERALD P. FRANCO has been named marketing services representative for Pennwalt Corporation's Lucidol Division... **LINDY GULBRANDSEN** has been appointed sales representative for the New York metropolitan area for John H. Calo Company Inc...

J. Windisch

M. Scharar

STEVEN B. GREENFIELD has been named group product manager for Hoechst-Roussel Agri-Vet Company.

FRANK J. POPOLA has joined Norton-Performance Plastics as a senior process engineer... **HELMUT K. MAIER** has been named manager of technology transfer in the International Division of Economics Laboratory

P.E. Bech, who has been appointed vice-president of the chemical business center at USI Chemicals, a division of National Distillers & Chemical Corporation.

Inc... **VERNELL P. LUDWIG** has been appointed executive vice-president of Algonquin Energy Inc., a subsidiary of Texas Eastern.

PETER K. GRIBBLE has been named associate director of industrial coatings at Glidden Coatings & Resins and **CARLOS E. ORTIZ** has been appointed technical manager for powder... **LEONARD J. BOEHM** has been named vice-president of marketing and sales at CasChem Inc.

NICHOLAS A. VITTORE has been named director of quality excellence for Desoto Inc.'s Chemical Products, Chemical Specialties and Royal divisions and **LESTER A. HENNING** has been appointed director of quality excellence for the company's Chemical Coatings Division... **JOHN MURPHY** has been named sales specialist for the textile care business of Diamond Shamrock Chemicals Company.

STEVEN S. COWELL, ALBERT P. HALLUIN, KATHERINE A. RUSSEL and **R.**

P. Kendall

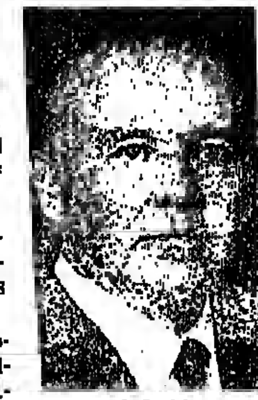
J. Webb

SCM Pigments Picks Two Vice-Presidents

SCM Pigments has appointed J. Corson Smith vice-president of sales and David L. Vercollone vice-president of marketing and sales.

Mr. Smith will be responsible for implementation, direction and execution of sales strategies. He was previously vice-president of marketing for titanium dioxide and titanium tetrachloride.

Mr. Vercollone will be responsible for the planning, direction and execution of marketing and sales strategies and programs for all US products of SCM Pigments.



J. Smith

D. Varcollone

JEFFERSON WORKS have been named vice-presidents at Cetus Corporation... **CHARLES J. HOAR** has been named senior area manager for the solvent and chemical business unit of Unocal Chemicals Division's petrochemical group and **BRUCE R. VAN BEBBER** has been named sales representa-

T. Labasu

B. Bouman

tive for the division.

JOHN GUIDICE, RICHARD CLAWSON and **PORTER BOLTZ** have been named account managers for National Starch & Chemical Corporation's Adhesives Division, and **ARTHUR EPP, WILLIAM J. KLUCKER** and **KEITH MILLER** have been named account supervisors for the division.

BUSINESS BRIEFS BUSINESS BRIEFS

'AVID', a miticide/insecticide marketed by MSD Agvet, has been granted Federal registration for control of two spotted spider mites and leafminers on flower crops, foliage plants and other non-woody ornamental plants. Spider mites and leafminers pose a serious threat to the nation's floral and foliage crops, which represent a wholesale value of over $1 billion annually.

BOEHRINGER BIOCHEMICALS, Indianapolis, has been appointed the sole US distributor of T Cell Sciences Inc.'s monoclonal antibody-based research products. These products include the "Califrea" interleukin-2 receptor test kit, which measures soluble, released interleukin-2 receptors in serum and other body fluids, and the "Act-T-Set" monoclonal antibodies used to measure the various stages of the immune response.

DU PONT maintenance management services says it has developed a software package to increase the productivity and effectiveness of plant maintenance programs. The software performs such functions as tracking equipment history and costs, planning and scheduling work, controlling spare parts inventory and work orders, scheduling preventative maintenance and accumulating maintenance costs, according to Du Pont.

ERSKINE-JOHNS Company, Los Angeles, has been appointed sales representative and distributor for Boots Technochemie Compimide BMI resins in the Western US. Erskine-Johns is a distributor and representative for composite materials and equipment to industry and aerospace. Boots Technochemie is a subsidiary of Boots PLC, the UK chemical and pharmaceutical firm.

FERMENTA PLANT PROTECTION Company is adding butoxone, propanil and dinitro to its product line. These post-emergent herbicides will be incorporated into Fermenta's agriculture business and will increase the firm's presence in the agrichemical markets, Fermenta says. Fermenta is based in Painesville, Ohio.

KEMIRA, INC. has introduced its "Unitl" line of seven chemical compounds for industrial use, which are based on Kemira's chloride and sulfate titanium processes. Current applications include catalysts, pearlescent pigments, chroma pigments, ceramics, oil field drilling muds, chemical synthesis, abrasives and refractories.

LONZA INC. has published a new brochure, called "Pyrimidines, Pteridines & Purines," which focuses on synthetic routes to the manufacture of three classes of N-heterocyclic compounds. The 96-page brochure describes the synthesis and biosynthesis of the pyrimidine, pteridiene and purine rings, and their industrial applications in agrichemicals and pharmaceuticals.

STOLT-NIELSEN INC. has completed the move of its ship management department from Greenwich, Conn. to Panama City, Fla. Stolt-Nielsen says it made the move in order to secure long-term overhead cost savings, to stay competitive with other ship managers operating internationally and to keep fleet management of Stolt Tankers' owned tonnage "in house."